Important note: Ontario’s response to the COVID-19 pandemic continues to evolve. Changes will likely occur as the province and its municipalities adjust to new data about the virus. In these circumstances, please be advised that changes to the delivery of courses, co-curricular opportunities, programs (including clinical programs or opportunities), and services may become necessary during the academic year. The University thanks its students, faculty, and staff for their flexibility during these challenging times as we work together to maintain the standards of excellence that are the hallmark of the University.
The School of Graduate Studies Calendar is available online in HTML and PDF formats.

In the case of any discrepancy, the HTML version shall apply.

Any corrections and/or updates will be posted at sgs.calendar.utoronto.ca/amendments.

Students are strongly advised to consult the web page regularly to keep informed of changes.

Composition by
School of Graduate Studies
University of Toronto

Published by
School of Graduate Studies
University of Toronto
September 2021

Front cover photo by Diana Tyszko.
Back cover photo by Ken Jones.
University of Toronto  School of Graduate Studies  2021-2022 Calendar
Graduate Programs

For admission and application information, contact the graduate unit directly. Contact information and website addresses are listed in each unit's entry.

Website

sgs.calendar.utoronto.ca

Student Services at SGS

Telephone: (416) 978-6614
Email: graduate.information@utoronto.ca

63/65 St. George Street, Toronto, Canada M5S 2Z9
Graduate Studies at the University of Toronto

Established in 1827 by royal charter, the University of Toronto is the largest research-intensive university in Canada, located in one of the world’s great urban regions.

Operating on three campuses with more than 93,000 students, including over 20,000 graduate students, the University is globally renowned for its teaching and research, and ranks third among universities worldwide in total output of academic publications.

Although master’s degrees were being awarded by the middle of the nineteenth century and the doctorate was established in the 1890s, the School of Graduate Studies (SGS) did not become a distinct academic division within the University of Toronto until 1922.

In 1965, SGS was reorganized and expanded. Today it comprises more than 80 graduate units (departments, centres, and institutes), offering approximately 300 graduate programs.

Most graduate units, while large enough to have a diversity of graduate courses, are small enough to allow students to have a sense of belonging to a recognized community of scholars, colleagues, and associates.

The goal of graduate studies at the University of Toronto is to provide students with the best material and human resources to learn the methods and standards of research necessary to work professionally at the frontiers of knowledge.

Research is central to graduate studies, particularly at the doctoral level. Research-oriented training conveys the importance of keeping pace with a subject, the knowledge of which is always changing. It fosters intellectual curiosity and a creative response to problems. It encourages students to communicate original discoveries effectively.

In the process of education, the graduate student comes to grips with the phenomenon of emerging knowledge. The process enriches the individual as well as the community participating in the exercise. The training and experience are valuable for all areas of work, whether one is teaching in a university; conducting research in government, industry, or private enterprise; or pursuing a professional career.

Research-oriented graduate training provides the means to embark on a lifelong voyage of intellectual discovery, an opportunity and challenge that gives graduate studies pre-eminence in formal education.

Mission Statement

Our mission is to foster excellence in graduate education by supporting and promoting outstanding graduate learning and research in an environment that encourages an exceptional student experience.

The School of Graduate Studies achieves its mission by:

- Working collaboratively to advance excellence and innovation in graduate research and education.
- Fostering an outstanding graduate experience for our diverse student population.
- Creating and promoting opportunities for graduate student professional development.
- Advancing integrity and ethical conduct in graduate research and education.
- Establishing policy and promoting best practices for graduate research and education.
- Providing registrarial and support services for the graduate community.

Dean’s Welcome

On behalf of the School of Graduate Studies, welcome to the University of Toronto. I encourage you to make the most of your graduate experience this year by engaging with our top-ranked faculty, who are immersed in innovative research in all disciplines; by connecting and collaborating with others in the graduate community; and by taking advantage of opportunities with leading hospitals, industries, community organizations, and educational facilities across North America. Despite the challenges we have all faced over the past year and a half, the University of Toronto is committed to providing you with an enriching experience over the course of your graduate program.

In the SGS Calendar, we outline the parameters of your program, the regulations and policies that guide it, and some of the key expectations that will inform your time here. SGS also offers a range of graduate-focussed services designed to support you holistically at every stage of your graduate program. These resources are available on the SGS website and the new SGS GradHub, our accessible and user-friendly web space for resources, supports, and services provided by SGS and its partners across the University. I also encourage you to read the monthly Gradschool e-news, our comprehensive e-bulletin about key resources and opportunities for graduate students across the University of Toronto’s three campuses.

Whatever your program and specialization, I hope you will find a way to stay connected to the University’s vibrant communities as you explore and advance your knowledge in the year ahead.

I wish you the best in your studies and look forward to supporting your journey,

Joshua Barker
Dean, School of Graduate Studies and Vice-Provost, Graduate Research and Education
Deans of the School of Graduate Studies

Dean, School of Graduate Studies and Vice-Provost, Graduate Research and Education
J. Barker, BA, MA, PhD

Vice-Dean, Research and Program Innovation
V. Goghari, BA, MA, PhD

Vice-Dean, Students
C. C. Williams, BA, MSW, PhD

About This Calendar

Effective Academic Period

The 2021-2022 School of Graduate Studies Calendar is effective for the academic period September 1, 2021 to August 31, 2022. References in the calendar to “current academic year” refer to this period.

Available Calendar Formats

The SGS Calendar is edited annually; it is available online in HTML and PDF versions in June. The last print edition was published in September 2016.

In the case of any discrepancy, the HTML version shall apply. Any post-publication corrections and/or updates to this calendar will be posted as amendments. Students are strongly advised to consult the web page regularly to keep informed of changes.

While graduate administrators are available to provide advice and guidance, it must be clearly understood that the ultimate responsibility rests with the student for completeness and correctness of program requirements and observance of regulations and deadlines. Students are responsible for seeking guidance from a responsible officer if they are in any doubt; misunderstanding or advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, program, or degree requirement.

The SGS Calendar describes the broad range of graduate study opportunities available at the University of Toronto. It also contains policies and procedures related to graduate studies. The calendar is divided into five major sections.

Sections

General Regulations outlines admission, registration, enrolment, grading, and graduation policies and procedures. Selected policies, codes, and guidelines established by the University of Toronto are also featured in this section with links to the full policy.

Degree Regulations discusses general admission and degree requirements for graduate degree programs. More details about each program are outlined in Programs by Graduate Unit.

Fee Regulations explains fee schedules, types of fees, and fees for graduate student categories.

Financial Support describes awards, assistantships, grants, and loans available to graduate students.

Graduate Programs. The largest component of the calendar features a comprehensive list of the graduate units that offer degree programs. The term “graduate unit” refers to a department, centre, institute, school, or Faculty.

The section is divided into three categories:

- degree and diploma programs by graduate unit
- combined degree programs
- collaborative specializations

Each graduate unit entry contains information about the programs offered, admission and program requirements, and courses. Faculty who are affiliated with the graduate unit and hold a graduate faculty membership are listed by appointment category: full member, member emeritus, and associate member.

For more details about a graduate program, visit the graduate unit's website.

Important Notices

Changes in Programs of Study and/or Courses

The programs of study that the SGS Calendar lists and describes are available for the academic year September 1, 2021 to August 31, 2022. They may not necessarily be available in later years.

If the University of Toronto or the School of Graduate Studies must change the content of programs of study or withdraw them, all reasonable possible advance notice and alternative instruction will be given. However, the University will not be liable for any loss, damages, or other expenses that such changes might cause.

For each program of study offered by the University through SGS, the courses necessary to complete the minimum requirements of the program will be made available annually. However, we reserve the right otherwise to change the content of courses, instructors and instructional assignments, enrolment limitations, prerequisites and co-requisites, grading policies, requirements for promotion, and timetables without prior notice.

Regulations and Policies

As members of the University of Toronto community, students assume certain responsibilities and are guaranteed certain rights and freedoms.
The University has several policies that are approved by the Governing Council and which apply to all students. All students must become familiar with the policies, and the University will assume that they have done so. The rules and regulations of SGS are listed in this calendar.

In applying to SGS, the student assumes certain responsibilities to the University and SGS and, if admitted and registered, shall be subject to all rules, regulations, and policies cited in the calendar, as amended from time to time, with the exception of program requirements. Each student is required to satisfy the program requirements found in the SGS Calendar (see Programs by Graduate Unit) of the academic year in which the student first registered in the graduate program.

All University policies can be found on the Governing Council website. Those of particular importance to students are:

- Code of Behaviour on Academic Matters
- Code of Student Conduct
- University Assessment and Grading Practices Policy
- Policy on Official Correspondence with Students

Find out more about students' rights and responsibilities.

Enrolment Limitations

The University makes every reasonable effort to plan and control enrolment to ensure that all of our students are qualified to complete the programs to which they are admitted and to strike a practicable balance between enrolment and available instructional resources.

Sometimes such a balance cannot be struck, and the number of qualified students exceeds the instructional resources that we can reasonably make available while at the same time maintaining the quality of instruction. In such cases, we must reserve the right to limit enrolment in the programs, courses, or sections listed in the calendar, and to withdraw courses or sections for which enrolment or resources are insufficient. The University will not be liable for any loss, damages, or other expenses that such limitations or withdrawals might cause.

Copyright in Instructional Settings

If students wish to voice-record, photograph, video-record, or otherwise reproduce lecture presentations, course notes, or other similar materials provided by instructors, they must obtain the instructor's written consent beforehand. Otherwise, all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

Person ID (Student Number)

Each student at the University is assigned a unique identification number. The number is confidential. The University strictly controls access to Person ID numbers. The University assumes and expects that students will protect the confidentiality of their Person IDs.

Notice of Collection of Personal Information

The University of Toronto respects the privacy of students.

Personal information that is provided to the University is collected pursuant to section 2(14) of the University of Toronto Act, 1971.

It is collected for the purpose of administering admissions, registration, academic programs, university-related student activities, activities of student societies, safety, financial assistance and awards, graduation and university advancement, and reporting to government.

In addition, the Ministry of Training, Colleges, and Universities has asked that we notify students of the following: The University of Toronto is required to disclose personal information such as Ontario Education Numbers, student characteristics, and educational outcomes to the Minister of Training, Colleges and Universities under s. 15 of the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, Chapter M.19, as amended. The ministry collects this data for purposes such as planning, allocating and administering public funding to colleges, universities, and other post-secondary educational and training institutions and to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the ministry for purposes that relate to post-secondary education and training. Further information on how the Minister of Training, Colleges and Universities uses this personal information is available on the ministry's website.

At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act.

If there are questions, please refer to www.utoronto.ca/privacy or contact:

Coordinator
University Freedom of Information and Protection of Privacy
McMurrich Building
Room 104, 12 Queen's Park Crescent West
Toronto, ON, M5S 1A8

Fees and Other Charges

The University reserves the right to alter the fees and other charges described in the SGS Calendar.
# 2021-2022 Sessional Dates

View previous years' sessional dates.

## 2021 Fall Session

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>M July 19</td>
<td>Registration for Fall session begins</td>
</tr>
<tr>
<td>M August 2</td>
<td>Civic Holiday (University closed)¹</td>
</tr>
<tr>
<td>F August 27</td>
<td>Recommended tuition fee payment deadline for students registering or starting their program in the Fall session to ensure payment is received by the registration deadline of September 10, and to avoid cancellation of registration and course enrolment. International students must make a payment by this date to ensure they are covered by the University Health Insurance Plan (UHIP) at the beginning of September.²(³)</td>
</tr>
<tr>
<td>F September 3</td>
<td>Coursework must be completed and grades submitted for Summer session courses and extended courses⁴</td>
</tr>
<tr>
<td>M September 6</td>
<td>Labour Day (University closed)¹</td>
</tr>
<tr>
<td>T September 7</td>
<td>Most formal graduate courses and seminars begin⁵</td>
</tr>
<tr>
<td>W September 8</td>
<td>Grades for all Summer session courses available for viewing by students on ACORN</td>
</tr>
<tr>
<td>F September 10</td>
<td>Registration deadline for students registering or starting their program in the Fall (September to December) session; after this date, a late registration fee will be assessed. Minimum required payment due (unpaid fees from previous session[s] + 100% of current Fall tuition fee charges).²</td>
</tr>
<tr>
<td>W September 15</td>
<td>Final date to submit final doctoral theses to SGS to avoid fee charges for 2021-22⁶</td>
</tr>
<tr>
<td>M September 20</td>
<td>Final date to add full-year and Fall session courses</td>
</tr>
<tr>
<td>Th September 30</td>
<td>Payment deadline to avoid service charges on unpaid Fall (September to December) session tuition and non-tuition fees for students registered in the Fall session only, except for those who have successfully registered without payment because they are receiving a full funding package via a research stipend, a major award or scholarship, teaching assistantships, tuition waiver, and/or sponsorships. Monthly service charges will begin accruing on October 15.¹(³)</td>
</tr>
<tr>
<td>F October 1</td>
<td>Final date to submit final doctoral theses for Fall Convocation</td>
</tr>
<tr>
<td>F October 1</td>
<td>Final date for receipt of degree recommendations and submission of any required theses for master's degrees for Fall Convocation without fees being charged for the Fall session⁷</td>
</tr>
<tr>
<td>M October 11</td>
<td>Thanksgiving Day (University closed)¹</td>
</tr>
<tr>
<td>M October 25</td>
<td>Final date to drop Fall session courses without academic penalty⁸</td>
</tr>
<tr>
<td>November</td>
<td>Fall Convocation information and dates are posted at governingcouncil.utoronto.ca/convocation.</td>
</tr>
<tr>
<td>November</td>
<td>Some Faculties offer a Fall session reading week, although SGS regulations do not require this. For example, the Faculty of Arts and Science Fall session reading week takes place from November 8 to 12. To find out if your Faculty has a reading week, please contact them directly.</td>
</tr>
<tr>
<td>T November 30</td>
<td>Payment deadline to avoid service charges on unpaid Winter (January to April) session tuition and non-tuition fees for students registered in the Fall and Winter sessions, except for those who have successfully registered without payment because they are receiving Ontario Student Assistance Program (OSAP) or other government loans, a full funding package via a research stipend, a major award or scholarship, teaching assistantships, tuition waiver, and/or sponsorships. Monthly service charges will begin accruing on December 15.¹(³)</td>
</tr>
<tr>
<td>F December 17</td>
<td>Recommended tuition fee payment deadline for all tuition fees billed for the 2021 tax year (Winter 2021, Summer 2021, and Fall 2021) for students who want eligible 2021 tuition fee payments to be reported on the 2021 calendar T2202 tax certificate, available for students to view and print on ACORN on February 21, 2022</td>
</tr>
<tr>
<td>T December 21</td>
<td>Recommended tuition fee payment deadline for international students registering or starting their program in the Winter session (i.e., those who were not registered in the previous Fall session) to ensure they are covered by UHIP at the beginning of January⁵(²)</td>
</tr>
</tbody>
</table>
### 2022 Winter Session

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M January 3</td>
<td>University re-opens</td>
</tr>
<tr>
<td>M January 3 or 10</td>
<td>Most formal graduate courses and seminars begin either on January 3 or January 10, depending on the graduate unit. Please consult with your graduate unit(s) to confirm when your courses will begin.</td>
</tr>
<tr>
<td>F January 7</td>
<td>Coursework must be completed and grades submitted for Fall session courses</td>
</tr>
<tr>
<td>M January 10</td>
<td>Recommended tuition fee payment deadline for students registering or starting their program in the Winter session (i.e., those who were not registered in the previous Fall session) to ensure payment is received by the registration deadline of January 24, and to avoid cancellation of registration and course enrolment.</td>
</tr>
<tr>
<td>W January 12</td>
<td>Grades for Fall session courses available for viewing by students on ACORN</td>
</tr>
<tr>
<td>M January 17</td>
<td>Final date to submit doctoral theses without payment of incidental Winter session fees</td>
</tr>
<tr>
<td>M January 17</td>
<td>Final date to add Winter session courses</td>
</tr>
<tr>
<td>F January 21</td>
<td>Final date for receipt of master's degree recommendations from graduate units and submission of any required theses for March or June graduation for master's students without fees being charged for the Winter session</td>
</tr>
<tr>
<td>F January 21</td>
<td>Final date for all students to request that their degrees be conferred in absentia in March</td>
</tr>
<tr>
<td>F January 21</td>
<td>Final date to submit final doctoral theses for March graduation in absentia</td>
</tr>
<tr>
<td>F January 21</td>
<td>Students dually registered in the Fall session must be recommended for the master's degree by this date to maintain their PhD registration.</td>
</tr>
<tr>
<td>M January 24</td>
<td>Registration deadline for students registering or starting their program in the Winter (January to April) session; after this date, a late registration fee will be assessed. Minimum required payment due (unpaid fees from previous session[s] + 100% of current Winter session tuition fee charges).</td>
</tr>
<tr>
<td>M January 31</td>
<td>Payment deadline to avoid service charges on unpaid Winter (January to April) session tuition and non-tuition fees for students registered in the Winter session only, except for those who have successfully registered without payment because they are receiving a full funding package via a research stipend, a major award or scholarship, teaching assistantships, tuition waiver, and/or sponsorships. Monthly service charges will begin accruing on February 15.</td>
</tr>
<tr>
<td>February</td>
<td>Some Faculties offer a Winter session reading week, although SGS regulations do not require this. For example, the Faculty of Arts and Science Winter session reading week takes place from February 21 to 25. To find out if your Faculty has a reading week, please contact them directly.</td>
</tr>
<tr>
<td>S February 20</td>
<td>Final date to drop full-year and Winter session courses without academic penalty</td>
</tr>
<tr>
<td>M February 21</td>
<td>Family Day (University closed)</td>
</tr>
<tr>
<td>March</td>
<td>March graduation in absentia information is posted at governingcouncil.utoronto.ca/convocation</td>
</tr>
<tr>
<td>April</td>
<td>For the last day of Winter classes, consult your graduate unit(s)</td>
</tr>
<tr>
<td>Th April 14</td>
<td>Final date for receipt of master's degree recommendations from graduate units and submission of any required theses from master's students for June Convocation</td>
</tr>
<tr>
<td>Th April 14</td>
<td>Final date for submission of final doctoral theses for students whose degrees are to be conferred at the June Convocation</td>
</tr>
<tr>
<td>Th April 14</td>
<td>Students dually registered in the Winter session must be recommended for the master's degree by this date to maintain their PhD registration.</td>
</tr>
<tr>
<td>F April 15</td>
<td>Good Friday (University closed)</td>
</tr>
<tr>
<td>Th April 21</td>
<td>For students obtaining degrees at June Convocation, coursework must be completed and grades submitted for full-year and Winter session courses</td>
</tr>
<tr>
<td>F April 22</td>
<td>Recommended tuition fee payment deadline for students registering or starting their program in the Summer session to ensure payment is received by the registration deadline of May 6, and to avoid cancellation of registration and course enrolment.</td>
</tr>
</tbody>
</table>
S April 30  Payment deadline to avoid service charges on unpaid Fall/Winter (September to April) session tuition and non-
tuition fees for students who have successfully registered without payment because they are receiving a full
funding package via a research stipend, a major award or scholarship, teaching assistantships, and/or
sponsorships. Monthly service charges will begin accruing on May 15.\(^{(2)(3)}\)

### 2022 Summer Session

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>For the first day of Summer classes, consult your graduate unit(s)</td>
</tr>
<tr>
<td>F May 6</td>
<td>Registration deadline for students registering or starting their program in the Summer (May to August) session; after this date, a late registration fee will be assessed. Minimum required payment due (unpaid fees from previous session[s] + 50% of Summer session tuition fees).(^{(2)})</td>
</tr>
<tr>
<td>M May 9</td>
<td>Final date to enrol in May-to-June or May-to-August session courses</td>
</tr>
<tr>
<td>F May 13</td>
<td>Coursework must be completed and grades submitted for full-year and Winter session courses (except for extended courses).(^{(4)})</td>
</tr>
<tr>
<td>W May 18</td>
<td>Winter session grades available for viewing by students on ACORN</td>
</tr>
<tr>
<td>M May 23</td>
<td>Victoria Day (University closed)(^{(1)})</td>
</tr>
<tr>
<td>F May 27</td>
<td>Final date to drop May-to-June F section courses without academic penalty(^{(8)})</td>
</tr>
<tr>
<td>T May 31</td>
<td>Payment deadline to avoid service charges on unpaid Summer (May to August) session tuition and non-tuition fees for students registered in the Summer session, except for those who have successfully registered without payment because they are receiving a full funding package via a research stipend, a major award or scholarship, teaching assistantships, tuition waiver, and/or sponsorships. Monthly service charges will begin accruing on June 15.(^{(3)})</td>
</tr>
</tbody>
</table>

#### June

- June Convocation information and dates are posted at [governingcouncil.utoronto.ca/convocation](governingcouncil.utoronto.ca/convocation)
- M June 13 Final date to drop May-to-August session Y section courses without academic penalty\(^{(8)}\)
- F July 1 Canada Day (University closed)\(^{(1)}\)
- M July 4 Final date to enrol in July-to-August courses\(^{(11)}\)
- F July 8 Coursework must be completed and grades submitted for May-to-June F section courses\(^{(4)}\)
- W July 13 Grades for May-to-June F section courses available for viewing by students on ACORN
- F July 22 Final date to drop July-to-August S section courses without academic penalty\(^{(8)}\)
- M August 1 Civic Holiday (University closed)\(^{(1)}\)

### Footnotes

1. University holiday schedule

2. To be registered, students must pay at least the Minimum Payment to Register Amount displayed on their current session ACORN invoice or have an approved request to register without payment (fee deferral) in place before the SGS registration deadline. A student’s status will change from “Invited” to “Registered” on ACORN when registration is complete.

   Students who successfully register without payment should arrange to make payments throughout the academic year as they receive funding from their scholarship, award, or other sources. Full payment of Fall and Winter session tuition and residence fees is due by April 30 at the latest.

   Students registered in the Fall and Winter sessions are not normally charged Summer fees. For students starting in the Summer, fees will appear in their ACORN invoice accordingly.

3. This allows up to 10 business days for processing and recording of the fee payment in the student’s ACORN account before the monthly service charge billing date for unpaid tuition and non-tuition fees. More information on service charges can be found on the [Student Accounts website](#).
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Graduate units may establish earlier deadlines for completion of coursework and may prescribe penalties for late completion of work and for failure to complete work, provided that these penalties are announced at the time the instructor makes known to the class the methods by which student performance shall be evaluated.</td>
</tr>
<tr>
<td>5</td>
<td>The precise dates of commencement of courses are determined by the graduate units; students are advised to contact the relevant graduate units for information. SGS maintains the 13-week graduate instruction period; however, if a course does not fall into the traditional 13-week period, the graduate unit will inform students of important dates and deadlines in the course syllabus. The University welcomes and includes students, staff, and faculty from a wide range of cultural, traditional, and spiritual beliefs. As per the Policy on Scheduling of Classes and Examinations and Other Accommodations for Religious Observances, the University will “…arrange reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays.” For more information, please refer to Accommodation: Religious Observances. The obligation not to discriminate on the basis of religion is a statutory duty arising from the Ontario Human Rights Code, which carries an obligation to accommodate religious requirements. Graduate students may only enrol in undergraduate courses with the approval of their supervisor or graduate unit. Students are responsible for meeting the deadlines and requirements of the undergraduate course as presented in class and in the undergraduate division’s calendar. Graduate students will be graded under the graduate grading scale. Students should consult the appropriate undergraduate calendar for enrolment and dates.</td>
</tr>
<tr>
<td>6</td>
<td>A final thesis is the corrected, approved version of the thesis which is submitted to SGS following the Final Oral Examination.</td>
</tr>
<tr>
<td>7</td>
<td>Graduate units may establish earlier deadlines for completing degree requirements. Students are advised to consult their own graduate unit for information.</td>
</tr>
<tr>
<td>8</td>
<td>Graduate units may establish earlier deadlines to add/drop courses but these dates must clearly be communicated to students. The last date to cancel a course or registration with no academic penalty is not the same as the last date to be eligible for a refund. Please refer to the Tuition Fee &amp; Refund Schedules for Graduate Studies on the Student Accounts website.</td>
</tr>
<tr>
<td>9</td>
<td>Academic fees for full-time doctoral students in the final year of their program, and who are before their maximum time limit, are pro-rated based on the 12-month academic year. Sessional incidentals will be charged at a full rate. Academic fees for doctoral students in the final extension year, and who are beyond their maximum time limit, are prorated based on 50% of the annual domestic fee for the 12-month academic year. Sessional incidentals will be charged at a full rate. For details, visit Final-Year Fees.</td>
</tr>
<tr>
<td>10</td>
<td>Please refer to the SGS policy on Dual Registration under General Regulations section 6.1.13</td>
</tr>
<tr>
<td>11</td>
<td>Students who start their program in the Summer and returning Ontario Institute for Studies in Education (OISE) students who are only enrolled in July-to-August Summer courses are required to register by this date by paying the minimum tuition amount stated in their invoice.</td>
</tr>
</tbody>
</table>
Graduate units (departments, centres, institutes, schools, or Faculties) are allocated into four divisions. Collaborative (interdisciplinary) specializations are designated as CS.

**Division 1: Humanities**
- Ancient and Medieval Philosophy (CS)
- Art History
- Book History and Print Culture (CS)
- Cinema Studies
- Classics
- Comparative Literature
- Diaspora and Transnational Studies (CS)
- Drama, Theatre and Performance Studies
- East Asian Studies
- Editing Ancient and Medieval Texts (CS)
- English
- French Language and Literature
- Germanic Languages and Literatures
- History
- History and Philosophy of Science and Technology
- Italian Studies
- Jewish Studies (CS)
- Linguistics
- Medieval Studies
- Mediterranean Archaeology (CS)
- Museum Studies (program housed in Information)
- Music
- Near and Middle Eastern Civilizations
- Philosophy
- Religion
- Slavic Languages and Literatures
- South Asian Studies (CS)
- Spanish
- Visual Studies (program housed in Architecture, Landscape, and Design)
- Women and Gender Studies
- Women and Gender Studies (CS)

**Division 2: Social Sciences**
- Anthropology
- Applied Psychology and Human Development
- Architecture, Landscape, and Design
- Community Development (CS)
- Comparative, International and Development Education (CS)
- Contemporary East and Southeast Asian Studies (CS)
- Criminology and Sociolegal Studies
- Curriculum, Teaching and Learning
- Development Policy and Power (CS)
- Economics
- Education, Francophones and Diversity (CS)
- Educational Policy (CS)
- Ethnic, Immigration and Pluralism Studies (CS)
- European, Russian, and Eurasian Studies
- Financial Economics
- Financial Insurance (program housed in Statistical Sciences)
- Forensic Accounting (program housed in Management & Innovation)
- Food Studies (CS)
- Geography and Planning
- Global Affairs and Public Policy
- Industrial Relations and Human Resources
- Information
- Investigative and Forensic Accounting (diploma program housed in Management & Innovation)
- Law
- Leadership, Higher and Adult Education
- Management, Rotman School of
- Management and Professional Accounting (program housed in Management & Innovation)
- Management, Tri-campus
- Management, University of Toronto Scarborough
- Political Science
- Psychological Clinical Science
- Sexual Diversity Studies (CS)
- Social Justice Education
- Social Work
- Sociology
Urban Innovation (program housed in Management & Innovation)
Workplace Learning and Social Change (CS)

Division 3: Physical Sciences
Aerospace Studies
Astronomy and Astrophysics
Biomedical Engineering
Biomedical Engineering (CS)
Chemical Engineering and Applied Chemistry
Chemistry
Civil and Mineral Engineering
Computer Science
Earth Sciences
Electrical and Computer Engineering
Engineering Education (CS)
Environmental Studies (CS)
Environment and Health (CS)
Environment and Sustainability
Knowledge Media Design (CS)
Materials Science and Engineering
Mathematical Finance
Mathematics
Mechanical and Industrial Engineering
Physical and Environmental Sciences
Physics
Psychology and Engineering (CS)
Statistical Sciences
Theoretical Astrophysics

Division 4: Life Sciences
Addiction Studies (CS)
Aging, Palliative and Supportive Care Across the Life Course (CS)
Biochemistry
Bioethics (CS)
Biotechnology (program housed in Management & Innovation)
Cardiovascular Sciences (CS)
Cell and Systems Biology

Dentistry
Developmental Biology (CS)
Ecology and Evolutionary Biology
Forestry
Genome Biology and Bioinformatics (CS)
Global Health (CS)
Health Policy, Management and Evaluation
Health Services and Policy Research (CS)
Immunology
Indigenous Health (CS)
Kinesiology
Laboratory Medicine
Laboratory Medicine and Pathobiology
Management of Innovation (program housed in Management & Innovation)
Medical Biophysics
Medical Science
Molecular Genetics
Musculoskeletal Sciences (CS)
Neuroscience (CS)
Next-Generation Precision Medicine (CS)
Nursing Science
Nutritional Sciences
Occupational Science and Occupational Therapy
Pharmaceutical Sciences
Pharmacology and Toxicology
Physical Therapy
Physiology
Psychology
Public Health Policy (CS)
Public Health Sciences
Rehabilitation Sciences
Resuscitation Sciences (CS)
Speech-Language Pathology
Sustainability Management (program housed in Management & Innovation)
Toxicology (CS)
Women's Health (CS)
# Graduate Programs at a Glance

## Degree Programs

All degree programs are offered full-time unless otherwise indicated.

### Legend

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<tr>
<th>Symbol</th>
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<tr>
<td>flex</td>
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<tr>
<td>p</td>
<td>Part-time option available in addition to full-time program</td>
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<tr>
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### Graduate Unit

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<td>Clinical Engineering</td>
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| Graduate Programs at a Glance                                      | Civil and Mineral Engineering | Cities Engineering and Management | MEngCEM$^{\text{EFT}}$
|---|---|---|---|
| Civil Engineering | Civil and Mineral Engineering | Cities Engineering and Management | MEngCEM$^{\text{EFT}}$
| Classics | Classics | Classics | MA$^p$, PhD
| Comparative Literature | Comparative Literature | MA, PhD
| Computer Science | Applied Computing | MScAC
| Computer Science | Computer Science | MSc$^p$, PhD
| Criminology and Sociolegal Studies | Criminology and Sociolegal Studies | MA$^p$, PhD
| Curriculum, Teaching and Learning | Curriculum and Pedagogy | MA$^p$, MEd$^p$, PhD$^{\text{flex}}$
| Language and Literacies Education | Language and Literacies Education | MA$^p$, MEd$^p$, PhD$^{\text{flex}}$
| Teaching | Teaching | MT
| Dentistry | Dentistry | MSc$^p$, PhD
| Drama, Theatre and Performance Studies | Drama, Theatre and Performance Studies | MA$^p$, PhD
| Earth Sciences | Earth Sciences | MA$^p$, MSc$^p$, PhD
| East Asian Studies | East Asian Studies | MA, PhD
| Ecology and Evolutionary Biology | Ecology and Evolutionary Biology | MSc, PhD
| Economics | Economics | MA$^p$, PhD
| Electrical and Computer Engineering | Electrical and Computer Engineering | MSc, MEng$^{\text{EFT}},$ PhD
| English | English | MA$^p$, PhD
| Environment | Environment and Sustainability | MES
| European, Russian, and Eurasian Studies | European and Russian Affairs | MA
| Financial Economics | Financial Economics | MFE
| Forestry | Forest Conservation | MFC$^{\text{EFT}},$ PhD$^{\text{flex}}$
| Forestry | Forestry | MScF, PhD
| French Language and Literature | French Language and Literature | MA$^p$, PhD
| Geography and Planning | Geography | MA$^p$, MSc$^p$, PhD
| Planning | Planning | MSc$^{\text{Pl}}$, PhD
| Germanic Languages and Literatures | Germanic Languages and Literatures | MA$^p$
| Germanic Literature, Culture and Theory | Germanic Literature, Culture and Theory | PhD
| Global Affairs and Public Policy | Global Affairs | MGA
| Public Policy | Public Policy | MPP
| Health Policy, Management and Evaluation | Health Administration | MHSc
| Health Informatics | Health Informatics | MHI
| Health Policy, Management and Evaluation | Health Policy, Management and Evaluation | MSc$^p$, PhD$^{\text{flex}}$
| History | History | MA$^p$, PhD$^{\text{flex}}$
| History and Philosophy of Science and Technology | History and Philosophy of Science and Technology | MA$^p$, PhD$^{\text{flex}}$
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<th>Graduate Programs at a Glance</th>
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<td>Management, Rotman School of Financial Risk Management</td>
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## Combined Degree Programs

### Undergraduate / Master's Degree Programs

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<th>Degrees in the Combination</th>
<th>Combined Degree Program</th>
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<td>STG, The Jeffrey Skoll Combined Bachelor of Applied Science in Engineering / Management, Master of Business Administration</td>
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<tr>
<td>BBA / MAccFin</td>
<td>UTSC, Bachelor of Business Administration, Specialist in Management and Accounting / Master of Accounting and Finance</td>
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<tr>
<td>BBA / MAccFin</td>
<td>UTSC, Bachelor of Business Administration, Specialist Co-op in Management and Accounting / Master of Accounting and Finance</td>
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<tr>
<td>BKin / MT</td>
<td>STG, Bachelor of Kinesiology / Master of Teaching</td>
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<td>HBA / MA</td>
<td>STG, Honours Bachelor of Arts, Minor in Education and Society / Child Study and Education, Master of Arts</td>
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<td>HBA / MScSM</td>
<td>UTM, Honours Bachelor of Arts, Major in Environmental Management / Master of Science in Sustainability Management</td>
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<td>UTM, Honours Bachelor of Arts, Specialist in Environmental Management / Master of Science in Sustainability Management</td>
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<td>HBA / MT</td>
<td>STG, Honours Bachelor of Arts, Major in English / Master of Teaching</td>
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<td>STG, Honours Bachelor of Arts, Major in History / Master of Teaching</td>
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<tr>
<td>HBA / MT</td>
<td>UTM, Honours Bachelor of Arts, Specialist in Language Teaching and Learning: French and Italian /</td>
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<td>UTM, Honours Bachelor of Arts, Major in French / Master of Teaching</td>
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<td>UTM, Honours Bachelor of Arts, Major in Human Geography / Master of Teaching</td>
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<td>UTM, Honours Bachelor of Arts, Major in Socio-Cultural Anthropology / Master of Teaching</td>
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<td>HBA / MT</td>
<td>UTSC, Honours Bachelor of Arts, Major in Theatre and Performance / Master of Teaching</td>
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<tr>
<td>HBA / MT</td>
<td>UTSC, Honours Bachelor of Arts, Specialist in English / Master of Teaching</td>
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<td>UTSC, Honours Bachelor of Arts, Specialist Co-op in English / Master of Teaching</td>
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<td>HBA / MT</td>
<td>UTSC, Honours Bachelor of Arts, Specialist in French / Master of Teaching</td>
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<td>HBSc / MA</td>
<td>STG, Honours Bachelor of Science, Minor in Education and Society / Child Study and Education, Master of Arts</td>
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<tr>
<td>HBSc / MA</td>
<td>UTM, Honours Bachelor of Science, Major in Psychology / Child Study and Education, Master of Arts</td>
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<td>MusBac / MT</td>
<td>STG, Bachelor of Music, Music, Stream in Music Education / Master of Teaching</td>
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### Second-Entry Undergraduate / Master's Degree Programs

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<th>Degrees in the Combination</th>
<th>Combined Degree Program</th>
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<td>STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Master of Arts</td>
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<tr>
<td>JD / MA</td>
<td>STG, Law, Juris Doctor / Economics, Master of Arts</td>
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<tr>
<td>JD / MA</td>
<td>STG, Law, Juris Doctor / English, Master of Arts</td>
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<tr>
<td>JD / MA</td>
<td>STG, Law, Juris Doctor / European and Russian Affairs, Master of Arts</td>
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<tr>
<td>JD / MA</td>
<td>STG, Law, Juris Doctor / Management, Master of Business Administration</td>
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<tr>
<td>JD / MGA</td>
<td>STG, Law, Juris Doctor / Master of Global Affairs</td>
</tr>
<tr>
<td>JD / MI</td>
<td>STG, Law, Juris Doctor / Master of Information</td>
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<tr>
<td>JD / MPP</td>
<td>STG, Law, Juris Doctor / Master of Public Policy</td>
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<td>JD / MSW</td>
<td>STG, Law, Juris Doctor / Master of Social Work</td>
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<tr>
<td>MD / MBA</td>
<td>STG, Medicine, Doctor of / Management, Master of Business Administration</td>
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<tr>
<td>PharmD / MBA</td>
<td>STG, Pharmacy, Doctor of / Management, Master of Business Administration</td>
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### Second-Entry Undergraduate / Doctoral Degree Programs

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<td>STG, Law, Juris Doctor / Economics, Doctor of Philosophy</td>
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<td>STG, Law, Juris Doctor / Philosophy, Doctor of Philosophy</td>
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### Master's / Master's Degree Programs

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<th>Degrees in the Combination</th>
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<td>MBA / MGA</td>
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| MHScc / MSW 
(admissions have closed) | STG, Health Administration, Master of Health Science / Master of Social Work |
| MI / MMSt                 | STG, Master of Information / Master of Museum Studies |
## Dual Degree Programs

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<th>Graduate Unit</th>
<th>Program Name</th>
<th>Degrees</th>
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<td>Applied Psychology and Human Development</td>
<td>Master of Education (University of Toronto) / Master of Medicine (China Medical University)</td>
<td>MEd / MMed</td>
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<tr>
<td>Global Affairs and Public Policy</td>
<td>Master of Global Affairs (University of Toronto) / Master of International Affairs (Hertie School of Governance)</td>
<td>MGA / MIA</td>
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<td>Master of Global Affairs (University of Toronto) / Master of Public Administration (London School of Economics)</td>
<td>MGA / MPA</td>
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<td>Master of Global Affairs (University of Toronto) / Master of Public Policy (Sciences Po)</td>
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<td>Law</td>
<td>Bachelor of Laws (National University of Singapore) / Master of Laws (University of Toronto)</td>
<td>LLB / LLM</td>
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<td>Bachelor of Laws (Tsinghua University) / Master of Laws (University of Toronto)</td>
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<td>Management, Rotman School of Management</td>
<td>Global Executive Master of Business Administration (University of Toronto / Bocconi University)</td>
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## Collaborative Specializations

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<th>Participating Degree Programs</th>
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<td>Addiction Studies</td>
<td>Community Health&lt;br&gt;Counselling and Clinical Psychology&lt;br&gt;Criminology and Sociolegal Studies&lt;br&gt;Medical Science&lt;br&gt;Nursing Science&lt;br&gt;Pharmaceutical Sciences&lt;br&gt;Pharmacology&lt;br&gt;Psychology&lt;br&gt;Public Health Sciences&lt;br&gt;Social Work&lt;br&gt;Sociology</td>
<td>MScCH&lt;br&gt;MA, PhD&lt;br&gt;MA, PhD&lt;br&gt;MSc, PhD&lt;br&gt;PhD&lt;br&gt;MSc, PhD&lt;br&gt;MSc, PhD&lt;br&gt;MA, PhD&lt;br&gt;MPH, MSc, PhD&lt;br&gt;MSW, PhD&lt;br&gt;MA, PhD</td>
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<tr>
<td>Aging, Palliative and Supportive Care Across the Life Course</td>
<td>Adult Education and Community Development&lt;br&gt;Anthropology&lt;br&gt;Counselling and Clinical Psychology&lt;br&gt;Counselling Psychology&lt;br&gt;Dentistry&lt;br&gt;Health Administration&lt;br&gt;Health Policy, Management and Evaluation&lt;br&gt;Information&lt;br&gt;Medical Science&lt;br&gt;Music&lt;br&gt;Nursing Science&lt;br&gt;Pharmaceutical Sciences&lt;br&gt;Psychology&lt;br&gt;Public Health Sciences&lt;br&gt;Rehabilitation Science&lt;br&gt;Social Work&lt;br&gt;Sociology</td>
<td>MA, MEd, PhD&lt;br&gt;MA, MSc, PhD&lt;br&gt;MA, PhD&lt;br&gt;MEd, EdD&lt;br&gt;MSc, PhD&lt;br&gt;MHSc&lt;br&gt;MSc, PhD&lt;br&gt;Mi, PhD&lt;br&gt;MSc, PhD&lt;br&gt;MA, PhD&lt;br&gt;MN, PhD&lt;br&gt;MSc, PhD&lt;br&gt;MA, PhD&lt;br&gt;MPH, MSc, PhD&lt;br&gt;MSc, PhD&lt;br&gt;MSW, PhD&lt;br&gt;MA, PhD</td>
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<tr>
<td>Graduate Unit</td>
<td>Program Name</td>
<td>Diploma</td>
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<tr>
<td>Women's Health</td>
<td>Anthropology, Dentistry, English, Health Policy, Management and Evaluation, Immunology, Kinesiology, Medical Science, Nursing Science, Nutritional Sciences, Occupational Therapy, Pharmacology, Psychology, Public Health Sciences, Rehabilitation Science, Religion, Social Work, Women and Gender Studies</td>
<td>MA, PhD, MSc, PhD, MA, PhD, MSc, PhD, MSc, PhD, MSc, PhD, MSc, PhD, MSc, PhD, MA, PhD, MA, PhD, MSc, PhD, MPH, PhD, MA, PhD, MSW, PhD, MA, PhD</td>
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<td>Adult Education and Community Development, Industrial Relations and Human Resources, Rehabilitation Science, Social Justice Education, Women and Gender Studies</td>
<td>MA, MEd, PhD, MIRHR, PhD, MSc, Phd, MA, MEd, EdD, PhD, MA</td>
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</table>

**Diploma Programs**

All diploma programs are offered full-time unless otherwise indicated.

**Legend**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>p</td>
<td>Part-time option available in addition to full-time program</td>
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<tr>
<td>p~</td>
<td>Program only offered part-time</td>
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<tr>
<th>Graduate Unit</th>
<th>Program Name</th>
<th>Diploma</th>
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<tr>
<td>Information</td>
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<td>GDiplStp</td>
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<td>Management</td>
<td>Professional Accounting</td>
<td>GDipPA</td>
</tr>
<tr>
<td>Management &amp; Innovation</td>
<td>Investigative and Forensic Accounting (admissions suspended)</td>
<td>DIFA~p</td>
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<td>Medical Science</td>
<td>Graduate Diploma in Health Research</td>
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<tr>
<td>Nursing Science</td>
<td>Post-Master's Nurse Practitioner</td>
<td>DipNP (PMNP)</td>
</tr>
<tr>
<td>Social Work</td>
<td>Advanced Diploma in Social Service Administration (admissions closed)</td>
<td>DSSA~p</td>
</tr>
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</table>
General Regulations

All graduate students are accepted under the General Regulations of the School of Graduate Studies (SGS). See also Degree Regulations and the program entries.

1 Organization of the School of Graduate Studies
2 Categories of Students
3 Application for Admission to a Degree Program
4 Admission Regulations and Procedures
5 Structure of Academic Programs
6 Registration and Enrolment
7 Good Academic Standing and Satisfactory Academic Progress, Time Limits, Supervision, and Candidacy
8 Thesis and Graduate Student Supervision
9 Graduation
10 Academic Appeals Policy
11 Policies and Guidelines

Exemptions: The Graduate Education Council of the School of Graduate Studies has the power to waive the application of a regulation in individual cases. Such exemptions are granted only in exceptional circumstances and require the favourable recommendation of the graduate unit and of the School of Graduate Studies.

1.3 Graduate Units

A graduate unit offers degree programs or graduate diplomas, courses, and research. It may be a department, centre, institute, school, or Faculty.

Each graduate student is enrolled in one of the units that offer graduate study. The graduate unit is responsible for ensuring that each student is admitted and enrolled in an appropriate program of studies and is responsible for thesis/research supervision in conformity with the policies and procedures of the School of Graduate Studies.

The unit’s chair, dean, or director is responsible for the graduate affairs within the unit. The administrative duties may be delegated by the unit’s chair or director, as appropriate.

1.4 Graduate Programs

Graduate programs are listed alphabetically in the Programs by Graduate Unit section of this calendar.

1.4.1 Degree Programs

A diverse range of both research-oriented and professional degree programs is offered at both the master’s and doctoral levels.

1.4.2 Collaborative Specializations

Collaborative specializations (CSs) emerge from cooperation between two or more graduate units and their graduate programs. The student has a broader base from which to explore a novel interdisciplinary area or some special development in a particular discipline.

The student must be admitted to, and enrol in, one of the collaborating graduate units (known as a “home” unit) and must fulfill all the requirements of the degree program in the home unit and any additional requirements of the CS. On successful completion of the program, the student receives a transcript notation indicating completion of the collaborative specialization, in addition to the degree.

1.4.3 Combined Degree Programs

Combined degree programs (CDPs) allow a student to study in two approved degree programs at the same time and to complete the requirements of both, providing a distinctive academic benefit to the student either through academic enrichment or academic acceleration. CDPs build on a strong academic rationale or synergy between the programs in the combination.
CDPs may embody the following combinations: undergraduate/graduate, second-entry undergraduate/graduate, or graduate/graduate. A CDP is an entity; the student is registered in a CDP as well as in the two participating degree programs. On successful completion of the CDP, the student receives two degrees.

1.4.4 Graduate Diploma Programs

Graduate diplomas may be offered at the master's, post-master's, and doctoral levels. They consist of approved graduate courses or other graduate academic activities appropriate to the diploma level. The University of Toronto offers graduate diploma programs in conjunction with a master's or doctoral degree and also graduate diplomas as a standalone program with direct admission.

1.4.5 Conjoint Programs

The University of Toronto and the Toronto School of Theology, in accordance with the Memorandum of Agreement between the two institutions, offer specific and approved conjoint programs, some of which are graduate degree programs. Students in a conjoint program are students at the University of Toronto; however, they are not registered at the School of Graduate Studies.

1.4.6 Joint Programs

A graduate joint degree program is a program of study offered by two or more universities, or equivalent institutions, in which successful completion of the requirements is confirmed by a single degree document.

1.4.7 Dual Degree Programs

A dual degree program is a program of study offered in partnership by the University of Toronto and an international peer university, or equivalent institution. In a dual degree program, a student’s successful completion of the program requirements of two existing degree programs is conferred with two degree documents or parchments. Dual degree programs build on a strong academic rationale between the programs in the combination and provide a distinctive academic benefit to students. Dual degree programs are governed by a memorandum of agreement.

1.5 Graduate Faculty

Responsibility for directing all elements of graduate teaching and supervision of students rests with members of the graduate faculty.

Graduate faculty membership is initiated by the chair/director of the graduate unit. With the approval of the School of Graduate Studies, the chair confirms graduate membership to the faculty member. Membership is offered in the following categories:

1.5.1 Full Members

Full members may:

- act as the sole or major supervisor of a doctoral or master's thesis for students in the graduate unit;
- act as a member of thesis committees of students in any graduate unit, as appropriate;
- serve as chair or voting member of a Final Oral Examination committee;
- assume responsibility for the setting and marking of comprehensive (general) examinations;
- teach, set, and mark examinations for a graduate course;
- give such other graduate direction as may be required.

1.5.2 Associate Members

Associate Members may be permitted to undertake all the duties of a full member but shall not serve as a sole or major supervisor, whether formally or otherwise, of a doctoral student nor act as the chair of a Final Doctoral Oral Examination.

1.5.3 Associate (Restricted) Members

Associate (restricted) members may be permitted to undertake the duties available to an associate member, but only as specified in writing at the time that the graduate membership is offered.

1.5.4 Members Emeriti

Members emeriti may perform all duties of a full member, but may only take on new supervision with the approval of the graduate chair, dean, or director of the graduate unit.

2 Categories of Students

The University offers admissions to three categories of graduate students:

1. degree or diploma student;
2. special (non-degree) student;
3. visiting student.

2.1 Degree or Diploma Student

A degree or diploma student is registered in a graduate degree or diploma program in the School of Graduate Studies.

A student who has completed all requirements for the doctoral degree exclusive of thesis research is deemed to have achieved candidacy and will be designated as a "doctoral candidate" in the School of Graduate Studies.

2.1.1 Degree or Diploma Student Conditionally Registered

Admission conditions enable a graduate unit to offer admission, and in some cases even allow registration, conditional upon satisfying some outstanding admission requirement(s) such as conferral of admitting degree. When credentials are from a university where the program of study cannot readily be appraised by the graduate unit, the applicant may be required to register conditionally (i.e., conditional upon demonstrating satisfaction of one or more admission requirements) for a period
not to exceed one academic session (four months). Applicants must hold a recognized degree with appropriate standing.

Failure to satisfy the condition by the registration deadline will result in the withdrawal of the offer of admission, at the request of the graduate unit.

2.2 Special (Non-degree) Student

Two categories of special students are described below. Special students are not registered in a program of study which may lead to a degree or diploma. All special students must be enrolled in at least one graduate course; some may be enrolled in both undergraduate and graduate courses. Special students must submit an application for admission for each academic year of study.

2.2.1 Special Student, Full-Time

Students who are changing disciplines or require preparatory work may be admitted as full-time special students and enrol in a full-time program of study not leading to a degree or diploma. Full-time special students are enrolled in more than 1.0 full course equivalent (FCE) per session.

2.2.2 Special Student, Part-Time

Students wishing to take 0.5 or 1.0 full course equivalent (FCE) may be admitted as part-time special students. Part-time special students may take a maximum of 0.5 or 1.0 full course equivalent (FCE) in any session as approved by the graduate unit. Coursework does not count for degree/diploma credit.

2.3 Visiting Student

Visiting students are registered under special arrangements in the School of Graduate Studies and are not admitted to a degree. For more information, visit the web pages on Visiting and Exchange Opportunities and International Visiting Graduate Students.

Students registered at Canadian universities can apply through the Ontario Visiting Student (OVGS) program, the Canadian University Graduate Transfer Agreement (CUGTA), or the Canadian Association for Graduate Students (CAGS) research mobility agreement. For further information on all three programs, students should consult their home university.

Students registered at international universities can apply to conduct research as a visiting student through the International Visiting Graduate Student (IVGS) program. Students must secure a U of T supervisor. They must also obtain approval from their home institution.

For all categories of visiting student, students must be registered in a graduate degree program at a recognized institution. Students in diploma or certificate programs, undergraduate students, and students on leave from their degree programs are not eligible.

3 Application for Admission to a Degree Program

3.1 Procedures

4. Application for admission should be submitted using the SGS Online Admissions Application. The exceptions for using the SGS Admissions Application are:

   - all programs offered through the Rotman School of Management;
   - MScPT, MScOT, and the MHSc in Speech-Language Pathology, which participate in a common provincial application for professional rehabilitation medicine programs (ORPAS).

5. Applicants must pay a non-refundable application fee of $125. Some graduate units have set higher application fees. Payment is made online at the time of application using a credit card. Application will not be processed until the application fee is received.

6. Applicants are required to provide a copy of their complete academic record issued directly from all of the universities attended. Letters of reference are also required. Individual graduate units may require further documentation.

7. Certified English translations of all international documentation written in a language other than English or French must also be submitted.

3.2 Application Deadlines

The graduate unit determines the deadline date for applicants to submit their applications, supporting documentation, and at least two letters of reference to be assured that they will be considered for a place in the program of their choice and for financial support.

For specific information on application and financial support deadlines, contact the graduate unit offering the program to which you are applying.

International applicants are encouraged to initiate their application early in the cycle to ensure timely submission, particularly where special documentation (and/or translation) and proof of English-language proficiency are required.

Most programs commence in Fall session. Some commence in Winter or Summer session. Applicants should consult the graduate unit to confirm program start times.

3.3 Acceptance to Program

Admission decisions are made by the graduate unit. The official acceptance letter is issued by the School of Graduate Studies. Admission decisions are final and are not appealable.

Applicants who are offered acceptance pending receipt of final transcripts must submit one official copy of their final transcripts to the graduate unit before final acceptance can be approved. If final transcripts do not indicate that the expected degree has been conferred, official documentation indicating the anticipated date of degree conferral must be submitted before registration.
Normally, students accepted to the School of Graduate Studies must commence their program of study on the date specified in their letter of acceptance. If circumstances prevent a student from starting study on the specified date, the graduate unit may approve to defer admission for a period not to exceed 12 months from the original commencement date. In such a case, an official transcript will be required to document any new study completed in the interim. If the period exceeds 12 months from the original date of expected commencement, the admission will be withdrawn and a new application must be submitted.

With the approval of the graduate unit, students accepted to begin their programs in September will be permitted to start the preceding summer. Students taking courses during the summer will pay the Summer session fees (academic, incidental, and ancillary), which is additional to the Fall and Winter session fees. Students engaged only in research must register but do not pay Summer session fees.

4 Admission Regulations and Procedures

The University’s admission regulations and procedures are designed so that students entering a graduate program may normally have the capacity and preparation necessary to meet the challenges of the program effectively.

The School of Graduate Studies regulations for admission specify minimal requirements only. Graduate units may have additional requirements and/or set higher than SGS minimum admission requirements. Meeting the minimal requirements of the graduate unit and the School of Graduate Studies does not guarantee admission.

The University reserves the right to determine whether credentials of other degree-granting institutions meet the standards for admission to University of Toronto programs. Admission decisions are final and are not appealable. The University also reserves the right to verify the accuracy of any documentation submitted as part of an application.

4.1 Academic Requirements for Admission

All applicants will be considered on their individual merits for admission to any graduate program at the University of Toronto. See Degree Regulations for further information.

4.1.1 Master’s Programs

Minimum Requirements

1. An appropriate bachelor’s degree with high academic standing from a recognized university, that has appropriate breadth and depth in a discipline deemed appropriate for the intended field of study.
2. An average grade equivalent to at least mid-B or better, normally demonstrated by an average grade in the final year or over senior courses.
3. At least two letters of reference.
4. Other qualifications as specified by the graduate unit.

4.1.2 Doctor of Philosophy Programs

Minimum Requirements

1. An appropriate master's degree, or in some programs an appropriate bachelor's degree with high academic standing, from a recognized university in a discipline deemed appropriate for the intended field of study.
2. An average grade equivalent to a B+ or better in a previous master's degree program. Where relevant, demonstrated research competence equivalent to at least a B+ grade will be considered.
3. Direct entry from a bachelor's degree to a PhD program may be available when permitted by the graduate unit. For direct-entry applicants, an average grade equivalent to A– or better in courses in the relevant discipline is required.
4. At least two letters of reference.
5. Other qualifications as specified by the graduate unit.

4.1.3 Other Doctoral Programs

Normally, an appropriate master's degree with high academic standing from a recognized university in a discipline deemed appropriate for the intended field of study is required. See appropriate graduate unit entry for details about specific minimum admission requirements.

4.1.4 Graduate Diploma Programs

Graduate diploma programs involve concurrent or standalone registration with a graduate degree program. Applicants to graduate diploma programs should complete the SGS Online Admissions Application.

Minimum Requirements

1. A bachelor's degree in a discipline deemed appropriate for the intended field of study is an appropriate degree for a graduate diploma.
2. Other qualifications may apply, as specified by the graduate unit.

4.1.5 Special Students

Before applying, applicants should identify the courses they wish to take and obtain approval from the graduate unit offering the course. With the approval of the graduate unit, they may serve to satisfy prerequisite requirements. Special students' programs must include at least one graduate course. Any tuition fees paid as a special student cannot be transferred to a subsequent degree program.

1. Full-time special students must have obtained an average grade equivalent to mid-B or better in the final year (or over senior courses) of an appropriate bachelor's degree program.
2. Part-time special students who are accepted with less than mid-B standing are not normally considered admissible to a master's degree at a later date.
3. At least two letters of reference are required for full-time special students.
4. Other qualifications as specified by the graduate unit.
4.2 Regulations and Procedures

4.2.1 Advanced Standing

Advanced standing refers to academic credit awarded upon admission to a program of study that enables direct entry to an identified higher academic achievement level of the program. Students are eligible for advanced standing if they meet a clearly articulated set of objectives and/or course requirements for an advanced-standing option as defined in the graduate program calendar entry. Not every program offers an advanced-standing option.

4.2.2 Eligibility of Students for Second Graduate Degree of Same Title

The University may confer upon a student a graduate degree having the same title as a previous degree, if that initial degree was obtained at a different institution. For students who already have obtained a University of Toronto degree, a second degree of the same name will not be conferred unless it is undertaken in a different field of study from the first.

4.2.3 Mature Students

Applicants who graduated five or more years ago but without achieving sufficiently high standing for admission to a graduate program may be considered for admission if, since graduation, they have done significant intellectual work and/or made a significant professional contribution that can be considered equivalent to a higher academic standing. This means that the mere passage of time in a profession is not sufficient. Graduate units must submit recommendations for admission to the School of Graduate Studies for approval.

This contribution and its impact on the profession must be detailed, documented, and presented as part of the application. Such applicants may be considered for admission if they can document that they have achieved qualifications at least equivalent to those stated in the preceding sections and if a graduate unit so recommends. Applicants should explain why they think their professional development activities or work experiences should be viewed as equivalent to academic work conducted at a university.

Examples of evidence may include but are not limited to:

- publications and/or research which is professionally relevant (including published papers, technical reports, or patents)
- a record of outstanding advancement in one's profession (e.g., progressive leadership roles, management of projects and personnel, professional or scientific citations, and awards)
- professional designations, diplomas, or certificates
- training or courses taken subsequent to the undergraduate degree and/or being an instructor of professional development courses to others in one's profession
- development of new skills over and above what would normally be expected in one's profession.

4.2.4 Eligibility of Members of Teaching and Administrative Staff

Members of teaching or administrative staff of the University or its federated or affiliated colleges who are engaged in graduate instructional and/or graduate administrative activities within the graduate unit offering the graduate program to which they are seeking admission are normally not eligible to be graduate students within that graduate unit at the University of Toronto.

Exceptions may be granted by SGS when it is confident that the graduate program is sufficiently remote from the faculty or staff member's usual work that academic impartiality is not compromised.

4.2.5 Transfers

4.2.5.1 Master’s to Doctoral

A student may be recommended for transfer from a master's program to a doctoral program. In such cases, the student will transfer to a five-year doctoral program with the years in the master's program being counted as part of the doctoral program. Courses may be excluded in the transfer. The total number of courses required for the doctoral program is the sum of the normal master's and doctoral course requirements, unless otherwise specified by the graduate unit. Where flexible-time is an approved option, a student may also be recommended for transfer to a flexible-time doctoral option with the years in the master’s program being counted as part of the doctoral program. Such a transfer must occur within 24 months of initial registration.

4.2.5.2 Doctoral to Master’s

Students transferring from the doctoral to the master's program must complete all of the normal master's degree requirements, or their equivalent, in order to be awarded the master's degree. These transfers are made on the recommendation of the graduate unit and must be approved by the School of Graduate Studies.

A second University of Toronto master's degree of the same name will not be conferred unless it is undertaken in a different field of study from the first. Students who transfer from the doctoral to the master's program will not be permitted to transfer subsequently to the doctoral program within the same graduate unit unless approved by the School of Graduate Studies.

4.3 English-Language Proficiency

Students must be able to communicate effectively in English to study at the University of Toronto. Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English. This is a requirement of admission and should be met before application, but must be met before the deadline to register.
This requirement may be satisfied using one of the English-language proficiency tests below. Test results that are older than two years at the time of application cannot be accepted. In these circumstances, the applicant must retake the English-language proficiency test. Minimum scores are indicated; however, many graduate units require a higher score.

4.3.1 Test of English as a Foreign Language (TOEFL)

Educational Testing Service (ETS)
Web: www.ets.org/toefl

The TOEFL examination is offered in two formats:

1. the Internet-based format (iBT) offered year-round
2. the paper-based format (PBT) only offered on specific dates in a limited number of countries

The iBT TOEFL must include the writing and speaking sections.

The PBT TOEFL must include the Test of Written English (TWE) component.

All applicants must satisfy the minimum TOEFL score requirements set by each of the four SGS academic divisions listed in the following chart.

<table>
<thead>
<tr>
<th>Academic Division</th>
<th>Internet-Based Test (TOEFL iBT) Including Writing and Speaking Sections</th>
<th>Paper-Based Test (TOEFL PBT) and TWE</th>
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<tbody>
<tr>
<td>I. Humanities</td>
<td>Overall score: 93 Writing: 22 Speaking: 22</td>
<td>Overall score: 580 TWE: 5</td>
</tr>
<tr>
<td>II. Social Sciences</td>
<td>Overall score: 93 Writing: 22 Speaking: 22</td>
<td>Overall score: 580 TWE: 5</td>
</tr>
<tr>
<td>III. Physical Sciences</td>
<td>Overall score: 93 Writing: 22 Speaking: 22</td>
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</tr>
<tr>
<td>IV. Life Sciences</td>
<td>Overall score: 93 Writing: 22 Speaking: 22</td>
<td>Overall score: 580 TWE: 5</td>
</tr>
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</table>

4.3.2 International English Language Testing System (IELTS)

Web: www.ielts.org

Required score: 7.0 (Academic) with at least 6.5 for each component.

4.3.3 Academic English Level 60

School of Continuing Studies, University of Toronto
Web: https://learn.utoronto.ca/english-language-program/programs/english-for-academic-purposes

Required score: B

4.3.4 Canadian Academic English Language (CAEL) Online

Web: www.cael.ca

Required score: 70 minimum total with at least 60 in each part.

4.3.5 The Certificate of Proficiency in English (COPE)

English Language Diagnosis and Assessment (ELDA)
Web: www.copetest.com

Required score: 76 minimum total with at least 22 in each component and 32 in writing

5 Structure of Academic Programs

5.1 Academic Year

In the School of Graduate Studies, the academic year begins in September and ends in August. The academic year is divided into three sessions:

- Fall (F) session (September to December)
- Winter (W) session (January to April)
- Summer (S) session (May to August)

5.2 Academic Programs

Academic programs leading to graduate degrees and diplomas are defined by the units that offer them and by the degree regulations. Consult the Degree and Diploma Programs by Graduate Unit section of this calendar.

5.3 Program Length

Program length is established at the time of initial approval of the program. Program length refers to the period of time (in sessions or academic years) for an academically well-prepared student to complete all program requirements while registered full-time. The program length is the period of time upon which the minimum degree fee is based (for master’s programs only).

The typical registration sequence for full-time master’s programs is shown in individual graduate unit entries: for example, the F/W/S abbreviation is used for Fall/Winter/Summer.

Actual time to complete a program may vary for individual students and across disciplines. Doctoral program length is established through the Doctoral Degree Regulations. All requirements for the degree must be completed within the time limit (see 5.5).
5.4 Period of Residence

Many programs specify a period of residence whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program. Residence provides the student with an opportunity to become immersed in the intellectual environment of the University. Exceptions to the residency requirement must be approved by the graduate unit.

5.5 Time Limit

All program requirements must be completed within a specific period of time. The time limit for a degree is the maximum period of registration permitted for the completion of the program. The time limit for all graduate degrees and combined programs are as follows:

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Time Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral</td>
<td>6 years</td>
</tr>
<tr>
<td>Direct-entry doctoral</td>
<td>7 years</td>
</tr>
<tr>
<td>Flexible-time PhD program option</td>
<td>6 to 8 years (depending on program)</td>
</tr>
<tr>
<td>Professional doctoral</td>
<td>5 to 6 years (depending on program)</td>
</tr>
<tr>
<td>Full-time master's</td>
<td>3 years (except for the MArch: 4 years; Dentistry MSc: 3 to 5 years)</td>
</tr>
<tr>
<td>Part-time master's</td>
<td>6 years</td>
</tr>
<tr>
<td>Combined degree programs</td>
<td>Time limit is established for each combined degree program. The time limit will be set at one year (or two for doctoral programs) beyond the established combined program length.</td>
</tr>
</tbody>
</table>

6 Registration and Enrolment

Registration is the process by which a person has established, for an academic period, an active association with a program of study.

Enrolment is a separate process from registration. It is the approved engagement by a student in a course or other academic activity or component of a program of study.

See the complete policy on Association, Admission, and Registration.

6.1 Registration Policies and Procedures

6.1.1 Registration Procedures

Students are required to register at the beginning of each session they wish to attend. The first step to registration is the payment of fees or arrangements to pay such fees. A student is considered to be registered once any conditions of admission have been satisfied and academic, incidental, and ancillary fees are paid or a fees arrangement has been made. New students who have received a conditional offer of admission should make arrangements with their graduate unit to clear conditions as soon as possible.

New graduate students will receive registration instructions prior to the registration dates listed in Sessional Dates. Students may access registration instructions from the SGS website and the graduate unit.

Registration material is posted online and students should consult the SGS website or their graduate unit’s website for detailed registration information. Students are asked to check their ACORN account to view their invoice online. Every effort is made to ensure that only students who are eligible to register receive registration material. However, receiving such material does not override any other notification students receive about academic status and eligibility.

6.1.2 Full-Time Studies

Students registered as full-time students in the School of Graduate Studies must be engaged in their studies on a full-time basis, as required by government regulations for full-time graduate studies.

Full-time graduate students are defined according to government regulations as follows:

1. They must be pursuing their studies as a full-time occupation and identify themselves as full-time graduate students.
2. They must be designated by the University as full-time students.
3. They must be geographically available and visit the campus regularly.
4. They must be considered to be full-time students by their supervisors.
5. If an academic program requires an absence from the University, students must apply through their graduate unit for permission to be off campus.

A full-time student may be absent from the University for an extended period or may participate in a program offered by another university if, and only if, the student has received written permission from the graduate unit in which they are registered. A graduate student who, in a given session, is absent from the University without receiving prior approval may lose good academic standing. In exceptional cases, a graduate unit may recommend to the School of Graduate Studies the termination of the student’s registration and eligibility.

6.1.3 Extended Full-Time (EFT) Studies

The EFT option permits an additional year of full-time studies to complete the program where the option is offered in a program.

1. The EFT registration option is available in professional master’s or professional doctoral programs where offered. Registration is full-time. A prescribed path to completion over the extended period is set out in the graduate unit’s calendar entry.
2. Full-time time limits apply to this option; the extended period may not exceed the time limit for the full-time program.
3. Students are charged the equivalent of the minimum degree fee which is spread out over the extended period; full-time incidental fees apply for each year of registration.
4. Students who do not complete the program in the prescribed period may apply for an extension and will be subject to the usual extension regulations.
5. Transfers between the EFT registration option and any other registration option are not permitted.
6. Students in this option are subject to the rules and conditions of full-time studies as set out in the Full-Time Studies section above.

6.1.4 Part-Time Studies

1. The option to undertake studies on a part-time basis is available in some master’s programs.
2. A student enrolled in part-time studies may, over the course of each academic year, normally take a maximum of one-third of the annual program requirements, as defined by the graduate unit; enrolment each session by part-time students is subject to graduate unit approval.
3. A prescribed path to completion may or may not be provided for part-time studies; where provided, it will be set out in the graduate unit’s entry in the SGS Calendar.
4. A student who is registered in part-time studies is subject to the minimum degree fee (see section 14.4 Minimum Degree Fee).
5. Transfer from part-time studies to full-time studies requires the approval of the graduate unit and may not be permitted in some programs.
6. Transfer from part-time studies to the extended full-time registration option is not permitted.
7. Time limits for part-time studies are outlined in section 14.4 Minimum Degree Fee.
8. Part-time special (non-degree) students may take a maximum of 0.5 or 1.0 full course equivalent (FCE) in any session as approved by the graduate unit; work does not count for degree credit.

6.1.5 Flexible-Time PhD Studies

1. Some PhD programs are approved to offer flexible-time studies.
2. Students in a flexible-time PhD program option will register full-time during the first four years and will switch to part-time registration during subsequent years in the program.
3. Students are required to be registered for every successive session, including summers, following the first session of registration unless granted a leave of absence.
4. The time limit, between six and eight years, will be established through the departmental regulations.
5. Transfers between the full-time PhD program and the flexible-time PhD program option are not permitted.

6.1.6 Summer Session Courses

Students enrolled in courses or engaging in research or project work in the summer must register for the Summer session.

Doctoral, MSc, and MASc students are already registered for the Summer session when they first register in:

- September for the September-to-August period or
- January for the January-to-August period.

In addition to a large program of research supervision and independent study, the School of Graduate Studies offers a limited number of graduate courses for credit towards higher degrees during the summer. Summer courses are equivalent to those offered during the Fall and Winter sessions but vary in duration and thus in frequency of meeting. Some courses will last 12 to 14 weeks while others will meet for 7 weeks.

For students enrolled in the May-to-August session, the maximum possible load is 2.0 full-course equivalents (FCEs). The maximum load in the May-to-June or July-to-August period is 1.0 FCE.

6.1.7 First Registration

Students beginning their degree programs normally register for the first time in the Fall session. In some cases, graduate units may give permission for new students to register for the first time in their program in the Winter or Summer session.

6.1.8 Continuity of Registration

Students in a thesis program (doctoral or master's) or in a coursework-only master's program with other requirements to complete, such as a project, major research paper, or recital, must be continuously registered or have an approved leave of absence.

6.1.8.1 Master's Students: Continuous Registration

Once they have first registered, full-time, part-time, and extended full-time master's students in programs that require continuous registration must register annually until all degree requirements have been completed. Full-time master's students who have completed the program length defined for the program may not register as part-time students.

6.1.8.2 Master's Students: Coursework-Only

Full-time master's students in coursework-only programs must register initially for the program length defined for the program and thereafter for each session in which they are completing requirements for the degree.

Master's students in coursework-only programs proceeding to their degree on a part-time basis register in those sessions in which they are completing course requirements for the degree. When all course requirements have been completed, part-time master's students must register annually until all other requirements have been completed. A switch from full-time to part-time status is not permitted once the program length defined for the program has been completed.
Prior to completing all courses in a coursework-only program, and with the permission of their graduate unit, master's students admitted to a full-time or part-time program may "stop out" between sessions for up to 12 months. However, no change is made to the time limit for completing the degree.

Master's students are advised to consult their graduate units for further information on continuity of registration requirements, particularly with regard to the Summer session; many graduate units expect their students to be registered for all three sessions.

### 6.1.8.3 Doctoral Students

All doctoral students must register continuously until all degree requirements have been fulfilled.

### 6.1.9 Late Registration Fee

Since it is the student's responsibility to ensure that proper registration is completed on time, late registration will be subject to an additional fee as specified in the Fee Regulations section of this calendar.

### 6.1.10 Failure to Register

Students will not receive credit for work completed during a session in which they have not registered.

Students who fail to register during a program requiring continuity of registration and who do not have an approved leave may only apply to re-register if, at the time of application, they are still within the maximum allowable time for the degree program (normal time limit plus maximum extension years). A student wishing to re-register must apply to the relevant graduate unit.

Re-registration requires approval from both the graduate unit and SGS. The program's normal requirements and time limits (as defined by regulation 5.5 Time Limit) will apply to reinstated students as if they had been continuously registered; reinstated students must pay fees owing for any session(s) in which they did not register. Non-registered students forfeit any funding that would have been available had they been registered.

### 6.1.11 Extension of Time for Completion of Degree Requirements

#### 6.1.11.1 Master's Students

In exceptional circumstances, a master's student who did not complete all the requirements for the degree within the time limit specified in the degree regulations may be considered for a maximum of three one-year extensions provided that the graduate unit concerned so approves. The first two extension requests require departmental approvals; the third requires departmental and School of Graduate Studies approvals.

To apply for an extension, the student must complete the Program Extension form and present to the graduate unit concerned the causes for the delay. If an extension request is made for a third and final extension, the student and the department must each provide confirmation that the degree requirements can be met within the time limits of the final extension. No registration beyond the extension period will be permitted.

#### 6.1.11.2 Doctoral Students

In exceptional circumstances, a doctoral student who has not completed all the requirements for the degree within the time limit for the doctoral degree is eligible to apply for four one-year extensions. The first two extension requests require graduate unit approvals; the second two require graduate unit and School of Graduate Studies approvals.

To qualify for an extension, the student must complete the Program Extension form and present to the graduate unit concerned the causes for the delay. If an extension request is made for a fourth and final extension, the student, the supervisor, and the department must each provide confirmation that the degree requirements can be met within the time limits of the final extension. No registration beyond the four-year extension period will be permitted.

### 6.1.12 Joint Educational Placement (JEP) for Doctoral Students

A Joint Educational Placement (JEP) is an opportunity for individual students to pursue their doctoral degree program under the joint supervision of faculty at the University of Toronto and a partner Canadian or international university. The JEP is intended to allow exceptional doctoral students to pursue research opportunities and acquire research experience in two institutions at an early stage in their doctoral studies.

At the time of application to the JEP, the applicant designates one of the participating institutions as the lead institution, the other as the collaborator. For students who designate the University of Toronto as the lead institution, the agreement must be completed prior to achieving candidacy. Regardless of whether the University of Toronto is the lead or collaborator institution, all U of T course requirements for the doctoral degree must be met as defined in the graduate unit entry in the SGS Calendar.

Applicants must meet the admission, registration, and degree requirements of both SGS and the partner institution. To be considered for this option, an applicant must complete the Joint Educational Placement agreement, must be recommended for admission as a full-time doctoral degree student, and must be deemed admissible by both institutions. Applications are assessed on a case-by-case basis by the graduate unit in consultation with SGS.

The academic and research program of a student enrolled in a JEP should be based on ongoing or developing research collaboration between supervisors and/or research groups in the two participating institutions. The academic and research program of a student enrolled in a JEP should be based on ongoing or developing research collaboration between supervisors and/or research groups in the two participating institutions. Students enrolled at the University of Toronto who successfully complete the requirements of the program receive a U of T degree with the parchment and transcript noting that the degree is “Awarded as a single degree under a Joint Placement arrangement (with the collaborator institution)” and may participate in a U of T convocation ceremony. The partner institution may also issue a parchment.
General Regulations

For the JEP agreement template and additional information, visit the SGS web page on Joint Educational Placement Students.

6.1.13 Dual Registration

A student in a master's program at this University who has been offered admission to a doctoral program conditional on completion of the master's program may be a dual registrant for only one session in both programs under the following conditions:

1. A minimal amount of work remains to complete the requirements for the master's degree. A student may enrol in a maximum of 0.5 full-course equivalent (FCE; one half course) for the master's program in the one session of dual registration with the approval of the graduate unit.
2. Permission has been granted by the graduate unit.
3. The student will be engaged in full-time doctoral studies and will be registered full-time in the doctoral and part-time in the master's program. Only the appropriate doctoral fees will be charged.
4. The period of dual registration will be either September 1 to December 31 or January 1 to April 30.

In order to receive credit for the doctoral program for the period as a dual registrant, the student must be recommended for the award of the master's degree by the deadlines in the SGS Sessional Dates. Otherwise, the doctoral registration will be cancelled, no credit for the doctoral program will be allowed, and the student will continue to be registered as a master's student only. An appropriate fees adjustment will be made so that the student will be charged fees only as a master's student.

Doctoral program course credit will be retained for courses completed in the period of dual registration, provided the graduate unit has informed the School of Graduate Studies.

Students who are not recommended for the master's degree by the deadline and whose enrolment in the doctoral program is thereby cancelled may not apply for dual registration a second time. They must successfully complete the requirements for the master's degree before registering in the doctoral program.

6.1.14 Simultaneous Registration

Simultaneous registration in two full-time programs is not permitted. With the consent of both graduate units concerned, or of the graduate unit and another Faculty or School, and written notification to the School of Graduate Studies, simultaneous registration in a full-time program and a part-time program may be permitted. Two part-time registrations in different programs also may be permitted. Students are responsible for the fees charged for both programs.

6.1.15 Leave Policy

Graduate students may apply to their graduate unit for a one-session to three-session leave during their program of study for:

1. health or personal problems which temporarily make it impossible to continue in the program; or
2. parental leave by either parent at the time of pregnancy, birth or adoption, and/or to provide full-time care during the child's first year. Normally, parental leave is completed within 12 months of the date of birth or custody. Where both parents are graduate students taking leave, the combined total number of sessions may not exceed four.

Once on leave, students will neither be registered nor will they be required to pay fees for this period. In general, students on leave may not make demands upon the resources of the University, attend courses, or expect advice from their supervisor. Students on an approved leave of absence may opt in to paying compulsory non-academic incidental fees and receive continued access to campus services offered by Student Life (Academic Success Centre, Career Centre, Centre for International Experience, Centre for Community Partnerships, Health and Wellness, Housing Services, Indigenous Student Services, Multi-Faith Centre, Student and Campus Community Development, etc.), Hart House, and the Faculty of Kinesiology & Physical Education during the leave of absence. Students on leave for parental or health reasons who wish to consult with their supervisor or other faculty are advised to make special arrangements through their graduate unit.

Students on leave will not be eligible to receive University of Toronto financial assistance. In the case of other graduate student awards, the regulations of the particular granting agency apply. Master's students whose programs do not require continuous registration may "stop out" as an alternative to taking a formal leave — see section 6.1.8.2 Master's Students: Coursework-Only.

Students may make application for a leave by completing the Leave of Absence form and submitting it to their graduate unit for approval. The form is then sent to the School of Graduate Studies for processing.

The time limit of the degree program will be extended by the duration of the leave taken, i.e., one, two, or three sessions as appropriate. Except for parental leave or in exceptional circumstances, it is not expected that a student will be granted more than one leave under the terms of this policy.

It is expected that leaves coincide with sessional start and end dates. In exceptional circumstances, students may request special arrangements, which require the approval of both the graduate unit and the School of Graduate Studies.

6.1.16 Withdrawal from a Graduate Program

A student may withdraw voluntarily from their program at any point. To withdraw from a program, a student first must submit a Program Withdrawal Form to the graduate unit and then to SGS. The withdrawal is recorded on the student academic record and reflected on the transcript; the University determines fee rebates, if applicable. Should the student wish to return, they must reapply. An application for re-admission by a student who has withdrawn will be made in competition with all other applicants.

6.1.17 Graduate Courses and Other Academic Activities

See the guidelines on Graduate Courses and Other Academic Activities.
6.1.17.1 Graduate Courses

All graduate programs are composed of a number of academic requirements that include graduate courses and other academic activities. A graduate course is a discrete, time-delimited unit of instructional/learning activity identified by a course code in which students enrol. Graduate courses must be approved as minor modifications. All graduate courses must have an instructor in charge who has a graduate faculty membership in the graduate unit(s) responsible for the course.

Graduate courses may vary in timing, weight, delivery mode, and format. Course codes may serve as markers for Other Academic Activities. See the guidelines on Graduate Courses and Other Academic Activities including Program Examinations.

If a course is not offered for more than five years, it becomes inactive; SGS will archive the course in ACORN. See the SGS guidelines for De-activating/Archiving and Re-activating Graduate Courses.

6.1.17.2 Course Code and Weight

All graduate courses have course codes consisting of:

- a prefix associated with the academic unit or program (three letters);
- a four-digit course number; and
- a suffix associated with the course weight (alpha character).

Normally, course weight is measured in full-course equivalencies (FCEs) and is indicated using a Y or H suffix:

- Y (full course): 1.0 FCE, normally taken over two sessions
- H (half course): 0.5 FCE, normally taken over one session

A full graduate course (course weight of 1.0 full-course equivalent [FCE]) should involve a minimum of 48 to 72 hours of organized activity (e.g., two lectures or three hours of laboratory work a week over two sessions). A half course (0.5 FCE) should require approximately half this time commitment.

Normally, the beginning and end dates for courses should coincide with the beginning and end dates of University sessions. Graduate units may offer modular courses which have enrolment deadlines that do not conform to the beginning and end of the sessions.

6.1.17.3 Other Academic Activities Including Program Examinations

Graduate programs may have a variety of requirements that are not courses but constitute other academic activities that have been approved according to SGS policies and procedures. Some common non-course academic activities are theses, major research papers, placements (including field work, clinical placements, and internships), and program examinations, etc.

Included in the category of program examinations are examinations such as comprehensive, qualifying, and field examinations. See individual program requirements in the

Programs by Graduate Unit section of this calendar. Individual program requirements will identify the:

- different components of each examination;
- format of each examination and its components, if any;
- deadlines and timelines associated with required completion of examinations; and
- consequences for failure of a required examination and/or its components, including information about the number of attempts permitted to satisfactorily complete the examination.

6.2 Enrolment Policies and Procedures

6.2.1 Enrolment

Students enrol with their graduate units and arrange programs of study (courses, research topics, supervisors, etc.). Students should contact the graduate unit regarding enrolment procedures. Enrolment should be completed by the deadline noted in the Sessional Dates.

Most formal classes and seminars in the:

- Fall session begin in the week of September following Labour Day
- Winter session begin during the first week of January
- Summer session begin in May.

However, starting dates are determined by the graduate units; students are urged to contact the relevant graduate unit for information.

Not every course will be offered in any one year. Consult the graduate unit concerning course availability.

6.2.2 Deadlines for Enrolment Changes

Graduate units may establish earlier deadlines for course changes. Courses must be dropped by completing an Add/Drop Course(s) form or by using ACORN, if the graduate unit permits access.

In order to avoid academic penalties, courses must be dropped by the following deadlines:

<table>
<thead>
<tr>
<th>Date</th>
<th>Deadline Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 20, 2021</td>
<td>Final date to add full-year and Fall session courses.</td>
</tr>
<tr>
<td>Oct. 25, 2021</td>
<td>Final date to drop Fall session courses without academic penalty.</td>
</tr>
<tr>
<td>Jan. 17, 2022</td>
<td>Final date to add Winter session courses.</td>
</tr>
<tr>
<td>Feb. 14, 2022</td>
<td>Final date to drop full-year and Winter session courses without academic penalty.</td>
</tr>
<tr>
<td>May 9, 2022</td>
<td>Final date to enrol in May-to-June or May-to-August session courses.</td>
</tr>
<tr>
<td>May 27, 2022</td>
<td>Final date to drop May-to-June F section courses without academic penalty.</td>
</tr>
</tbody>
</table>
General Regulations

Students enrolled in coursework-only programs who drop all courses by the deadlines must withdraw from the program.

Some graduate units offer modular courses which have enrolment deadlines that do not conform to the deadlines in the above chart. All modular courses with non-standard start/end dates require the graduate unit to establish suitable drop dates.

6.2.3 Exceptional Circumstances Affecting Student Performance

Students with health problems or other personal circumstances which may adversely affect their performance in, or their ability to complete coursework, examinations, or other departmental or graduate program assessments may request special consideration. Students with long-term needs are encouraged to register with Accessibility Services.

Written requests, supported by a medical certificate or other appropriate evidence, must be submitted to the instructor or the graduate unit as soon as possible. If a medical certificate is submitted, it must confirm the student was adversely affected by health problems and must show the dates of illness and that the physician was consulted at the time of the illness.

If a student is affected by health problems or other personal circumstances during an examination that affect the completion of the examination, the student must notify the instructor or invigilator immediately; that is, the student should not wait until the end of the examination. Such notification must be followed up with a written request for special consideration as above.

6.2.4 Completion of Coursework and Grade Submission

Coursework must be completed and grades submitted by the following dates:

- **Jan. 7, 2022**: Coursework must be completed and grades submitted for Fall session courses.
- **May 13, 2022**: Coursework must be completed and grades submitted for full-year and Winter session courses (except for extended courses). *For students receiving degrees at June convocation, grades must be submitted by April 14.*
- **July 8, 2022**: Coursework must be completed and grades submitted for May-to-June F section courses.
- **Sept. 2, 2022**: Coursework must be completed and grades submitted for July/August Summer session courses and extended courses.

Graduate units may establish earlier deadlines for completion of coursework and may prescribe penalties for late completion of work and for failure to complete work, provided that these penalties are announced at the time the instructor makes available to the class the methods by which student performance shall be evaluated.

6.2.5 Coursework Extensions

Students are expected to meet the course deadlines, both of the School of Graduate Studies and of the graduate units in which they are registered, and are advised to plan their research projects accordingly. Students who find themselves unable to meet SGS deadlines for completing coursework can, under certain conditions, receive extensions for completing the work after the date set by SGS. Students must be registered in the session in which they are completing coursework extensions.

6.2.5.1 Petitions for Course Extensions

The authority to grant an extension for the completion of work in a course beyond the original SGS deadline for that course rests with the graduate unit in which the course was offered, not the instructor of the course. Students will petition the graduate unit for extensions, using a standard form provided by SGS.

The deadline for requesting an initial extension is the deadline for completion of coursework and grade submission for courses offered in the relevant session, as specified in this calendar.

A student on extension who is unable to complete the required coursework in the extension period specified by the graduate unit may apply to the graduate unit for a continuation of the extension (subject to the time limits and deadlines for extensions, set out below); however, the student must make such a request before the expiry date of the extension period in place.

6.2.5.2 Grounds for Course Extensions

Legitimate reasons for an extension can be academic in nature (e.g., unexpected problems of research in a course) or non-academic (e.g., illness). In order to ensure as much uniformity and fairness as possible in the granting of extensions (or continuations of extensions), the relevant graduate unit must be reasonably certain that:

1. the reasons for the delay are both serious and substantiated: the student must provide a statement detailing the reasons, together with a physician’s letter in the case of illness;
2. the student would not be granted an unfair academic advantage over fellow students in the course;
3. the student would not be placing in jeopardy the normal and satisfactory completion of new coursework; and
4. the student does have a reasonable chance of completing outstanding requirements within the time to be allotted.

6.2.5.3 Deadlines for Course Extensions

If a graduate unit grants a petition for a course extension, it must specify an extension period which is not to run beyond the SGS deadline for completion of coursework and grade submission following the original SGS deadline for the course. Thus, the deadlines for course extensions are as follows:
A graduate unit may grant a continuation of an extension that is already in place provided that it does not extend the total period of the extension beyond the foregoing deadlines.

Extensions beyond these deadlines will require the approval of both the graduate unit and the School of Graduate Studies.

### 6.2.5.4 Grade-Reporting Procedures

The graduate unit will assign the temporary course report of SDF (Standing Deferred) to a student on an approved coursework extension, pending receipt from the instructor and graduate unit of a final course report. The final course report is due no later than the SGS deadline for completion of coursework and grade submission in the subsequent session.

If, by that date, the student has not submitted the outstanding coursework, the submitted grade should be the actual grade earned in the course, calculated with zero assigned to any coursework that is still incomplete.

If there are compelling reasons for a further extension, and a graduate unit-supported request is approved by SGS, then the temporary report of SDF will be maintained until either a final course report is received by SGS, or the relevant deadline has expired.

Use of non-grade course reports such as WDR or INC, and amendments to submitted grades, must be approved by the School of Graduate Studies. Grade and non-grade notations appear in transcripts and are governed by the University Assessment and Grading Practices Policy.

### 6.2.5.5 SGS and Graduate Unit Notification

Graduate units are to notify SGS of extensions no later than the original deadlines for submitting grades for the relevant courses or, in case of continuations, no later than the expiry dates of the original periods of extension, providing in each case the new deadline for completion of coursework.

In addition, a graduate unit should notify the graduate unit in which the student is registered when it is not the same as the one granting the extension.

### 6.2.6 Extra Courses Not Required for the Degree

Graduate units may permit students to enrol in additional courses not required for the degree. Such courses must be so designated on the student's enrolment form.

These courses are subject to the same regulations regarding withdrawal, failure, and failure to complete work as are courses required for the degree, except that repetition or replacement of failed or incomplete courses may be waived by the graduate unit.

### 6.2.7 Prerequisite Courses

At least B– is required in all prerequisite courses but some graduate units may require a higher average; students should consult the graduate unit in advance.

### 6.2.8 Auditing a Graduate Course

Graduate units determine if they wish to allow auditing of their courses and which groups of students and non-students specified in the University of Toronto's Policy on Auditing of Courses they wish to allow. When auditing is allowed, the final decision to permit an individual to audit rests with the instructor of the course. In all cases, students registered in the University who wish to audit courses have priority over others.

An auditor may attend lectures and other class meetings, take part in class discussions, and, when the appropriate fee is paid, receive written confirmation of attendance. An auditor will not receive evaluations of participation and will not be allowed to submit assignments or write examinations and tests except by special and express permission.

Audited courses are not recorded on the student's official transcript. The following University of Toronto codes apply to auditors:

- Code of Student Conduct
- Code of Behaviour on Academic Matters

Further information about access, certificates of attendance, and fees for auditing may be obtained from Student Services at the School of Graduate Studies.

### 6.2.9 Transfer Credit and Exemptions

Transfer credit for graduate work completed in another program or as an SGS special student is limited to 1.0 full-course equivalent (FCE) or 25% of the course requirements for any degree, whichever is greater, provided that the courses have not been credited towards another degree, diploma, certificate, or any other qualifications. Such credit may be given on the recommendation of the student's graduate unit and with the School of Graduate Studies' approval, normally upon admission. Exceptions to the limit are allowed when approved for specific degrees.

Students participating in an approved exchange program on the recommendation of their graduate unit may receive transfer credit for up to 50% of the course requirements for their degree. They may also complete language requirements while on the exchange. When recommended by the unit and approved by SGS, that percentage may be exceeded by doctoral students.

In all cases, transfer credit arrangements for exchange program participants must be approved in advance by SGS.

Transfer of credit and course exemptions include the following categories:
6.2.10 Credit/No Credit (CR/NCR)

Degree students in the School of Graduate Studies may not normally select any degree credits to be assessed on a Credit/No Credit basis. Graduate units may identify specific graduate programs in which students may elect to be assessed on a Credit/No Credit basis in specific courses on a limited basis. This information appears under the entry of the graduate unit offering the program.

**Deadline**

In graduate programs where this option is enabled, students can choose or remove this mode of assessment on ACORN; the deadline to do so is the last date to drop the relevant course without academic penalty. Once the deadline has passed, students may not reverse this decision.

**Eligibility for CR or NCR**

To achieve a status of CR (Credit), a student must achieve a final mark of at least B–. Marks below that will be assessed as NCR (No Credit).

Students taking a course on a CR/NCR basis will not be identified individually to the instructor teaching that course; they will be assessed in the same way as all other students in the course, i.e., will have the same assignments and tests and will be evaluated with the same expectations.

This option is not available to SGS non-degree students.

Note to graduating students: The CR/NCR option is only open to degree students. Once students have graduated, they become non-degree students and they may not complete courses on a CR/NCR basis, even if they enrolled in the course before their graduation. For example, if a student is graduating in June and they select the CR/NCR option for a Summer course, or if a student is graduating in November and they select the CR/NCR option for a Fall or Winter course, the CR/NCR option will be removed upon graduation and a refined letter grade will appear on the student’s record.

The CR/NCR option cannot be selected for a course if there is an allegation of academic misconduct. If a student has specified the CR/NCR option for a course in which an academic offence has been committed, the CR/NCR option will be revoked and the refined letter grade will stand as the course grade.

**Important Notes and Limitations of CR/NCR**

The underlying mark of a course completed on a CR/NCR basis will not be released or reported in any way. However, the School of Graduate Studies cannot determine how an external body may read or interpret the CR/NCR on a transcript. If a specific mark may be required in a course for professional or graduate school applications or for other reasons in the future, students should not choose the CR/NCR option. Students may wish to seek advice of their Graduate Coordinator when considering the use of CR/NCR.

**7 Good Academic Standing and Satisfactory Academic Progress, Time Limits, Supervision, and Candidacy**

**7.1 All Degree Students**

To be in good academic standing, a student registered in a degree program in the School of Graduate Studies must:

1. comply with the General Regulations of the School of Graduate Studies as well as with the Degree Regulations and program requirements governing that degree program; and
2. make satisfactory progress towards the completion of the degree.

All degree students are admitted under the General Regulations of the School of Graduate Studies, described in this section of this calendar. The degree regulations for the various doctoral and master's degrees offered by the School of Graduate Studies are specified in the Degree Regulations section of this calendar and in the Programs by Graduate Unit section, under the entry of the graduate unit offering the graduate program leading to the relevant degree. The specific requirements for the various graduate programs offered in the School of Graduate Studies are described under the entry of the graduate unit offering the program.

Each student is required to satisfy the program requirements found in the SGS Calendar (see Programs by Graduate Unit) of the academic year in which the student first registered in the graduate program. Failure to maintain good academic standing may result in various sanctions, including ineligibility for financial assistance, lowest priority for bursaries and assistantships, and even termination of registration.

The School of Graduate Studies may terminate the registration and eligibility of a student

1. who fails to comply with the General Regulations of the School of Graduate Studies, the relevant Degree Regulations, or the specific degree requirements of the graduate unit in which the student is registered; or
2. who fails to maintain satisfactory progress in the degree program in which the student is registered, as measured either by the general standards of the School of Graduate Studies or by the specific standards of the graduate unit.
7.2 Full-Time Students

Students must meet the full-time studies requirements to be in good academic standing — see General Regulations, section 6.1.1 Registration Procedures.

7.3 Timely Completion of Graduate Program Requirements

Each graduate unit establishes specific requirements for degree programs, in addition to those of the School of Graduate Studies, as well as standards of satisfactory performance and progress. These requirements and standards are described in the appropriate entry in the Programs by Graduate Unit section of this calendar and in material published separately by graduate units.

Continuation in a degree program requires satisfactory progress towards the completion of that program. A student's progress in a degree program will be considered satisfactory only if the student satisfies and completes the various requirements for that degree in a manner consistent with the SGS General Regulations and Degree Regulations and the graduate unit's timeline for completion of the degree program.

A graduate unit may recommend to the School of Graduate Studies that a student's registration and degree eligibility be terminated when a student fails to maintain satisfactory progress towards the completion of the degree.

7.4 Satisfactory Completion of Graduate Courses

Satisfactory performance in a degree program requires the completion of every course taken for graduate credit with a grade of at least a B–; some graduate units may require a minimum grade above a B– for some or all courses.

If a student fails to complete a graduate course in a satisfactory manner (i.e., receives a grade report of FZ or NCR in a course or receives a grade report below the minimum acceptable by the graduate unit), then the graduate unit in which the student is registered may recommend to the School of Graduate Studies that the termination of registration and eligibility of that student.

If the student is permitted to continue, the student must repeat the relevant course, or take an alternative course recommended by the graduate unit and approved by the School of Graduate Studies, and obtain a satisfactory grade. The report for the course that was not completed in a satisfactory manner as well as the report for the repeated or alternative course will appear on the student's academic record.

7.5 Doctoral Students

7.5.1 Achieving Candidacy: Requirements and Time Limit

A degree student who has completed all requirements for the doctoral degree exclusive of thesis research will be designated as a “doctoral candidate” in the School of Graduate Studies.

To achieve candidacy, students in doctoral degree programs must:

1. complete all requirements for the degree exclusive of thesis research and courses such as ongoing research seminars that run continuously through the program; and
2. have an approved thesis topic, supervisor, and supervisory committee.

Candidacy must be achieved by the end of Year 3 for all doctoral programs, except for the five-year doctoral program, flexible-time PhD program option, and professional doctoral programs begun on a part-time basis. For those exceptions, candidacy must be achieved by the end of Year 4 of registration (see chart below).

Note: The foregoing time limits do not apply to courses that run continuously throughout the program.

<table>
<thead>
<tr>
<th>Doctoral Degree Program Categories</th>
<th>Time Limit to Achieve Candidacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral, four-year program</td>
<td>by end of Year 3</td>
</tr>
<tr>
<td>Doctoral, five-year program (direct-entry)</td>
<td>by end of Year 4</td>
</tr>
<tr>
<td>Flexible-time PhD program option</td>
<td>by end of Year 4</td>
</tr>
<tr>
<td>Professional doctoral program, full-time</td>
<td>by end of Year 3</td>
</tr>
<tr>
<td>Professional doctoral program, part-time</td>
<td>by end of Year 4</td>
</tr>
</tbody>
</table>

In exceptional circumstances, a student who has not met these requirements may be permitted to register in the program for up to 12 months (3 sessions) at the discretion of the graduate unit in which the student is registered. Continuation beyond 12 months will require the approval of both the graduate unit and the School of Graduate Studies.

Completion of the program requirements identified above will signal the achievement of candidacy. Successful completion of candidacy is recognized by a notation on the transcript.

See also requirements and deadlines in the Degree Regulations and unit entries in the Programs by Graduate Unit section of this calendar.

7.5.2 Supervision and Satisfactory Progress

All doctoral students must have an identified supervisor and supervisory committee as early as practicable in their program. The supervisory committee should consist of the supervisor chosen from among the graduate faculty members of the graduate unit in which the student is registered and two other members of the graduate faculty.

Where appropriate, the graduate unit should assist in selection of the supervisor. Both student and supervisor should be involved in the selection and approval of other supervisory committee members.
8 Thesis and Graduate Student Supervision

8.1 Thesis Topic and Supervision

A thesis is a piece of scholarly writing. In those degree programs for which a thesis is part of the requirements, the work upon which the thesis is based must be conducted under the direction of one or more members of the faculty of the School of Graduate Studies.

Students must choose a thesis topic for which the graduate unit in which they are registered is able to provide adequate supervision.

A student’s choice of thesis topic, as well as their choice of supervisor from among the graduate faculty members available in the graduate unit and supervisory committee, is subject to the approval of the Graduate chair, director, or dean in the graduate unit in which the student is registered.

8.2 Doctoral and Master’s Supervision

While the special, collaborative relationship between student and supervisor serves as a foundation for graduate education, particularly at the doctoral level, the primary responsibility for graduate programs and their supervision rests with the graduate unit. The chair, director, or dean of the graduate unit has the principal obligation and authority for exercising these responsibilities, in accordance with the Constitution of the School of Graduate Studies, and, therefore, for implementing the academic and procedural standards established in the School of Graduate Studies.

Although this calendar outlines procedures to be followed in the supervision of doctoral and master’s students, it is clear that these have general applicability for all graduate students to some degree. It is essential that students have access to information relevant to their graduate program of studies, in all domains.

Thus, each graduate unit will provide students with documentation that provides details of all procedures involved with graduate training, a list of members of the graduate faculty with relevant information concerning their participation, fields of expertise and supervision, and access to the SGS Graduate Supervision Guidelines.

In addition, updated statements must be made available to students on a regular basis. These will include the availability of financial assistance, and relevant information to affected students about the expected absences of their supervisor(s) and/or advisor(s).

Any graduate student who believes that their graduate unit is not following the supervision guidelines may inform their graduate unit or the School of Graduate Studies.
The academic experience is greatly enhanced if members of the academic faculty, in addition to the direct supervisor, are readily and formally available for consultation and discussion with the graduate student. Therefore, an individual thesis supervisory committee or, as an alternative, an area supervisory committee, should be struck as early as possible for each graduate student, and certainly from the commencement of thesis supervision.

The graduate unit is responsible for adopting a procedure for monitoring the progress of doctoral students registered in its programs. Consistent with the SGS Graduate Supervision Guidelines, the procedure must contain, at minimum, a supervisory committee that:

1. consists of the supervisor, chosen from among the graduate faculty members of the graduate unit in which the student is registered, and at least two graduate faculty members who hold a graduate faculty membership;
2. if a co-supervisor is identified, must also hold a graduate faculty membership in the student’s graduate unit;
3. meets with the student at least once per year to assess the student's progress in the program and to provide advice on future work; and
4. submits a report detailing its observations of the student's progress and its recommendations.

Further, the student must be given the opportunity to respond to the supervisory committee's report and recommendations and to append a response to the committee's report. Copies of the report must be given to the student and filed with the graduate unit.

8.3 Doctoral Final Oral Examination

All doctoral students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of the School of Graduate Studies, as follows:

1. The candidate shall defend the thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. The process of scheduling the examination, allowing time for professional appraisal, can be expected to take at least eight weeks, and candidates should discuss the timing with the graduate administration of their unit. Candidates should also ascertain whether their unit imposes regulations over and above the minimal conditions required by SGS.
2. The graduate unit will notify SGS eight weeks prior to the examination when the thesis is ready to go forward for examination. In the absence of any particular local procedure, the candidate’s supervising committee will advise SGS that the thesis is ready to proceed. In rare cases, a thesis may proceed to examination without the approval of the supervising committee; candidates who wish to proceed without such approval should contact SGS.
3. The thesis will be sent to an appraiser external to the University of Toronto, appointed by SGS on the recommendation of the graduate unit. (The supervisor of the thesis will propose a list of names of possible external appraisers to the graduate coordinator or chair, who will choose one and send the recommendation to SGS for approval. The graduate unit will certify that the external appraiser has an arm's-length relationship to the candidate and supervisor.) The external appraiser must be a recognized expert on the subject of the thesis and must be external to the University as well as to its affiliated teaching hospitals and research institutes. Such an individual must be an associate or full professor at the home institution or, if the individual comes from outside the academic sector, must possess the qualifications to be appointed to an academic position at this level. Arrangements with external appraisers are the responsibility of the graduate unit. In particular, the graduate unit must allow the external appraiser sufficient time to act. The graduate unit must have a copy of the thesis delivered to the appraiser at least six weeks, and preferably longer, in advance of the examination date. Appraisals must be submitted to SGS at least two weeks in advance of the examination date; if they are not, the examination may have to be rescheduled. The graduate unit must also ensure that copies of the thesis are made available to all other voting members of the examination committee at least four weeks in advance of the examination date.
4. An examination committee, appointed by SGS on the recommendation of the graduate unit, will conduct the Final Oral Examination. The examination committee must include at least four, but no more than six, voting members: one to three of the voting members will have served on the candidate’s supervisory committee, and at least two voting members will not have been closely involved in the supervision of the thesis. Eligible for inclusion in the latter group are the external appraiser (in person or remotely), members of the graduate faculty of the candidate’s graduate unit, and members of the graduate faculty of other departments, centres, or institutes of the University. The examination committee may include, in addition, up to two non-voting members, who will be members of the graduate faculty of the candidate’s graduate unit or members of the graduate faculty of another graduate unit of the University. A quorum is four voting members, two of whom must not have been closely involved in the supervision of the thesis. Graduate units must ascertain in advance the willingness of the persons named to act. SGS may modify the composition of the examination committee to fit exceptional circumstances.
5. SGS will appoint a non-voting chair to the examination committee. The chair will be a full member or member emeritus of the graduate faculty, holding no appointment to the graduate faculty of the candidate’s graduate unit.
6. The graduate unit is responsible for scheduling the examination, booking a room, and making appropriate technical arrangements.
7. The graduate unit must submit to SGS, via ROSI, a nomination form; an abstract of the thesis, in English, not longer than 350 words; and a copy of the examination program.
8. The graduate unit will send a copy of the external appraisal of the thesis to SGS as soon as it is received. The graduate unit is responsible for the distribution of copies of the external appraisal to the candidate (two weeks before the examination) and members of the examination committee. It should not be distributed beyond that group and the relevant administrative officers before the examination. The candidate is to be instructed not to communicate with the external appraiser/examiner until the examination is under way.
9. Members of the graduate faculty are entitled to attend the examination, and with the permission of the chair, they may ask questions of the candidate, but they must...
withdraw before the committee’s discussion and vote. A qualified observer may attend, subject to the same restrictions, if the graduate unit has received approval for such attendance in writing beforehand from SGS. Otherwise, the examination is closed to the public. The vote at the examination takes into account both the thesis and the oral defence itself.

10. The examination committee represents the SGS Graduate Education Council and through it the University. It is therefore responsible for the standard of the doctoral degree in this University. Graduate unit examinations held immediately in advance of the final oral must not therefore interfere with attendance at, or thoroughness of, the final examination. The committee must evaluate the external appraisal of the thesis, which is to be considered only as an individual opinion to be employed as the committee sees fit. It must examine the candidate on the content and implications of the thesis. Where someone other than the candidate is a co-author of any portion of the thesis, the examination committee must be satisfied that the candidate’s personal contribution to the thesis is sufficient to fulfill the requirements of the doctoral degree. In addition to determining the adequacy of the thesis, the committee must satisfy itself that the thesis document meets the proper standards of scholarship. The committee possesses the full authority of the School of Graduate Studies with respect to the examination.

11. A quorum for the final examination is four voting members, two of whom must not have been closely involved in the thesis, plus the examination committee chair, who has no vote. Voting shall be by signed ballot, and the names of the examiners and their respective votes shall be read to the examination committee by the chair. If a quorum is not present, the chair must delay the examination to obtain a quorum or may postpone the examination to another date.

12. The candidate passes on the first examination:
   a. if the decision is unanimous;
   b. or if there is not more than one negative vote or abstention.

If there is more than one negative vote or abstention, adjournment is mandatory. In the event of adjournment, the examination committee must provide the candidate, as soon as possible, with a written statement that indicates the reasons for adjournment and the committee’s requirements for the reconvened oral examination. In addition, the examination committee must decide the approximate date of the reconvened examination. The time between the adjourned examination and the reconvened examination should be as short as circumstances will permit and in no case shall exceed one year.

At the reconvened examination, no new committee members shall be added, except for necessary replacements. It is the obligation of the examiners to attend the reconvened examination

The candidate passes on the reconvened examination:
   a. if the decision is unanimous;
   b. or if there is not more than one negative vote or abstention.

No further adjournment will be allowed. If a candidate is not recommended for the degree by the committee in charge of the second examination, the candidate is ineligible for further doctoral candidacy at the University. The examination committee must provide the candidate, as soon as possible, with a written statement that explains clearly and directly why the examiners found the candidate’s performance unsatisfactory on the written and/or oral components of the examination, as may be relevant. The candidate’s registration in the graduate program will be terminated.

1. If minor corrections in style are a condition of acceptance of the thesis, the candidate must complete the corrections within one month of the date of the examination, and the supervisor will inform the candidate of the necessary corrections. The supervisor must notify the School of Graduate Studies directly in writing that the required corrections have been made by the candidate, with a copy of the correspondence sent to the graduate coordinator of the graduate unit, before the candidate is recommended for the degree.

2. If minor modifications are a condition of acceptance of the thesis, the chair of the examination committee will appoint a subcommittee of the examination committee (to be approved by the examination committee) to supervise the proposed modifications. One member of the subcommittee is designated by the chair, with the approval of the examination committee, as the convener. The convener will be responsible for the preparation of a statement detailing the modifications required. Modifications must be completed within three months of the date of the oral examination. The members of the subcommittee will report on the acceptability of the completed modifications to the convener. If all members of the subcommittee approve the completed modification, the candidate will be passed without the necessity of reconvening the examination committee. The convener of the subcommittee must certify in writing to the School of Graduate Studies, within three months of the original examination, that the modifications have or have not been satisfactorily completed. If one or more members of the subcommittee do not approve the completed modifications, the Final Oral Examination must be reconvened within a year of the date of the original examination.

3. The examination committee must decide the nature of minor modifications, but it is intended that minor modifications should be more than corrections in style and less than major changes in the thesis. A typical example of minor modifications might be clarification of textual material or qualification of research findings and conclusions.

For further details, students should consult the Producing Your Thesis section of the SGS website.

8.4 Submission of Theses

One electronic copy of the final approved version of the defended thesis (master’s or doctoral) must be submitted to SGS through the digital research repository for the University of Toronto community.

The format of the submitted thesis must comply with the School of Graduate Studies guidelines.

SGS requires that every doctoral thesis be published substantially as it is accepted. The preservation and public dissemination of original dissertation research is a principle to which the University, as a publicly funded institute of higher
education, is strongly committed. Unrestricted release of theses means permanent worldwide access through the Internet. Students retain copyright on the thesis as the thesis author. However, in exceptional cases, the author, in consultation with the thesis supervisor and with the approval of the chair of the graduate unit, shall have the right to postpone distribution and publication for a period up to two years from the date of acceptance of the thesis. In exceptional circumstances and on written petition to the Dean of the School of Graduate Studies, the period might be extended, but in no case for more than five years from the date of acceptance of the thesis unless approved by the SGS Graduate Education Council.

All theses will be submitted to ProQuest, which in turn makes theses available for purchase on its ProQuest Dissertations and Theses Global Database and includes the catalogue records in its bibliographic services. Following submission to ProQuest, theses will be made openly available on TSpace, the University of Toronto’s research repository, and submitted to the national thesis program at Library and Archives Canada.

Thesis submission initiates the request for graduation. A bound printed copy of the doctoral thesis in its final form may be required by the candidate's graduate unit. Candidates should consult their unit to determine the format, number, and distribution of such copies.

Students must agree to the Library and Archives Canada Theses Non-exclusive License when making an electronic submission; any necessary copyright permissions will be uploaded to the digital research repository at this time.

Specific formatting guidelines must be followed so that theses conform to the requirements of SGS and for the publication of the thesis. Theses that do not conform to these formatting guidelines will not be accepted. For more information about required fees, forms, copyright, thesis formatting, and other related matters, visit the Producing Your Thesis section of the SGS website.

8.4.1 Doctoral Thesis

Prior to the Final Oral Examination, required copies of the doctoral thesis must be submitted by the candidate to the graduate unit. The candidate should consult the graduate coordinator regarding requirements and deadlines for submission of material.

The graduate unit is responsible for ensuring that a copy of the thesis is available at the Final Oral Examination.

Following successful completion of the Final Oral Examination, an electronic copy of the final approved version of the thesis and the required form(s) must be submitted to SGS (see section 8.4 Submission of Theses).

Confirmation in writing that any corrections or modifications deemed necessary after the defence must also be received by SGS (see General Regulations section 8.3 Doctoral Final Oral Examination).

8.4.2 Master’s Thesis

Students should consult their graduate unit for additional local format requirements, submission deadlines, and procedures concerning master’s theses.

An electronic copy of the thesis must be submitted to the School of Graduate Studies only after the thesis has been successfully defended and any final corrections have been made. The School of Graduate Studies also requires a copy of the letter from the student's supervisor confirming completion of any required corrections.

Students may also be required to submit a bound copy or copies of the thesis to the relevant graduate unit.

9 Graduation

9.1 Degree Recommendations

When all requirements for a master’s degree program or graduate diploma program have been fulfilled, the graduate unit is required to submit a degree recommendation or diploma recommendation to the School of Graduate Studies indicating that the program has been satisfactorily completed by the student. Students should note that in the case of thesis master's programs, degree recommendations are only approved after the thesis and required supporting documents have been submitted to SGS.

When all requirements for a doctoral program have been fulfilled and a final copy of the thesis, as well as required supporting documents, have been submitted to SGS, the student will be recommended for graduation by SGS.

Master's and doctoral students must graduate at the convocation immediately following the completion of their degree requirements.

9.2 Convocation Ceremonies

Convocation ceremonies are held twice a year, in the spring and fall. Students who choose to attend a ceremony must attend the ceremony which directly follows the completion of their degree requirements. SGS Student Services submits the names of the graduands to the Office of Convocation, which is responsible for the procedures for the convocation ceremony and the issuance of diplomas.

Students who complete degree requirements by the January deadline can choose to have their degree conferred in absentia in March (there is no ceremony) or attend the ceremony in June.

The School of Graduate Studies will not release the official diploma to students who have outstanding debts or obligations to the University in accordance with the Policy on Academic Sanctions for Students Who Have Outstanding University Obligations. See section 11.9 Access to Official Student Academic Records.

Graduation information is available at governingcouncil.utoronto.ca/convocation.
10 Academic Appeals Policy

10.1 General

Graduate students may appeal substantive or procedural academic matters, including grades, evaluation of comprehensive examinations and other program requirements; decisions about the student's continuation in any program; or concerning any other decision with respect to the application of academic regulations and requirements to a student.

Decisions related to admission to an academic program, including admission to the doctoral program for current master's students, are not subject to appeal.

Appeals (except those under 10.1.1) must be initiated within the student's home graduate unit unless the appeal relates to a course outside the graduate unit, in which case it must be initiated in the graduate unit in which the course was taken, with notification to the student's home graduate unit. In the case of collaborative specialization core courses, the appeal is pursued through the student's home graduate unit where representation from the collaborative specialization will be included in the constitution of an appeal committee or hearing.

10.1.1 Exception

The process of academic appeal described in this policy must be followed for all disputes except appeals related to failure of a Final Doctoral Oral Examination or related to termination of registration in a program. Such appeals must be made directly to the SGS Graduate Academic Appeals Board (GAAB).

These appeals begin at Graduate Appeal Step 3 (section 10.3.3). In some such cases, the chair of GAAB may refer the appeal to the Graduate Department Academic Appeals Committee (GDAAC) for prior consideration and a recommendation to GAAB. The GDAAC does not have the right to overturn a failed Final Doctoral Oral Examination result or a termination of registration, but may recommend that such a decision be considered further by GAAB.

10.2 Informal Mediation

At any stage before filing and until the hearing of any appeal with the SGS Graduate Academic Appeals Board, a student may consult SGS for advice and/or informal mediation. With the consent of both parties, a representative of SGS will serve as informal mediator, attempting to resolve the dispute or clarify issues. Timelines are not affected by mediation. Consultation with SGS at an early stage is encouraged.

In cases where SGS has approved the termination of a student's registration or in cases where perceived or actual conflict of interest is identified, the student will have access to an alternate informal mediator.

10.3 Steps

The overall graduate appeals process is set out in the table below. Students should note the timelines for each stage carefully.

10.3.1 Step 1: Informal

In the case of dispute, students must first attempt to resolve the matter with the instructor or other person whose ruling is in question. Should the matter not be resolved with the instructor, and should the student wish to pursue the matter, the student must discuss the matter with the graduate coordinator/chair/dean of the graduate unit.

10.3.2 Step 2: Department Appeal

Should such discussions fail to resolve the matter, the student may make a formal appeal in writing to the Graduate Department Academic Appeals Committee (GDAAC).

The student must complete a Notice of Appeal to GDAAC; a copy of this notice is available from the graduate coordinator/chair/dean in every graduate unit. This form must be completed and delivered to the chair/dean of the graduate unit or the chair of GDAAC within the specified timeline of eight weeks from the date of the decision under appeal.

The chair of the GDAAC will determine, at their sole discretion, whether the appeal will proceed by way of an oral hearing and/or written submissions. In either case, at the conclusion of the hearing and/or review of the written submissions, the GDAAC will make a recommendation to the chair/dean of the graduate unit regarding the merits of the appeal. The chair/dean of the graduate unit will then render the department-level appeal decision. GDAAC guidelines for chairs/deans are made available to all parties in an appeal.

10.3.3 Step 3: Appeal to GAAB

1. The student may appeal the decision of the chair/dean of the graduate unit by filing a Notice of Appeal to the SGS Graduate Academic Appeals Board (GAAB) within eight weeks of the decision of the chair/dean of the graduate unit.

2. Filing a Notice of Appeal to GAAB is the first step for a student who is making an appeal regarding the failure of the Final Doctoral Oral Examination or termination of registration in a graduate program.

10.3.4 Step 4: Governing Council Appeal

A decision of the SGS Graduate Academic Appeals Board (GAAB) may subsequently be appealed by a student to the Governing Council's Academic Appeals Committee, in accordance with its guidelines and procedures. An appeal to this committee shall be commenced by filing a notice of appeal with its Secretary no later than 90 days after the date of the GAAB decision under appeal.
### Steps and Timelines

<table>
<thead>
<tr>
<th>Steps and Timelines</th>
<th></th>
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<tbody>
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<td><strong>Timeline for Student Action at Each Stage</strong></td>
<td><strong>Timeline for Decision/Action by University Body at Each Stage</strong></td>
</tr>
<tr>
<td><strong>See Note A below</strong></td>
<td><strong>See Note B below</strong></td>
</tr>
<tr>
<td><strong>1. Informal</strong></td>
<td><strong>8 weeks from filing of Notice of Appeal to GDAAC</strong></td>
</tr>
<tr>
<td>a. Student to instructor</td>
<td><strong>8 weeks from filing of Notice of Appeal to GAAB</strong></td>
</tr>
<tr>
<td>b. Student to graduate coordinator/chair/dean</td>
<td><strong>8 weeks from filing of Notice of Appeal to GAAB</strong></td>
</tr>
<tr>
<td><strong>2. Graduate-Unit-Level Appeal</strong></td>
<td><strong>3. SGS Appeal</strong></td>
</tr>
<tr>
<td>Notice of Appeal to GDAAC</td>
<td>a. Notice of Appeal to GAAB</td>
</tr>
<tr>
<td><strong>Note:</strong> Appeals related to failure of the Final Doctoral Oral Examination or to termination of registration in a graduate program must be made directly to GAAB; see Step 3b below.</td>
<td>b. Appeal begins here for students who wish to appeal failure of the Final Doctoral Oral Examination or termination of registration in a graduate program.</td>
</tr>
<tr>
<td><strong>4. Governing Council Appeal</strong></td>
<td><strong>N/A</strong></td>
</tr>
<tr>
<td>Notice of Appeal to GCAAC</td>
<td><strong>90 days from decision of GAAB</strong></td>
</tr>
<tr>
<td><strong>8 weeks from decision of graduate unit chair/dean</strong></td>
<td><strong>b. 8 weeks from written notification of failure of the Final Doctoral Oral Examination or termination of registration in a graduate program</strong></td>
</tr>
<tr>
<td><strong>3 Governing Council Academic Appeals Committee</strong></td>
<td><strong>4. Governing Council Appeal</strong></td>
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<td><strong>2 Graduate Academic Appeals Board</strong></td>
<td><strong>Notice of Appeal to GCAAC</strong></td>
</tr>
<tr>
<td><strong>1 Graduate Department Academic Appeals Committee</strong></td>
<td><strong>N/A</strong></td>
</tr>
</tbody>
</table>

### Note A: A student may apply, in writing and with reasons, for an extension of time. Such applications may be made to the chair of GDAAC for graduate-unit-level appeals or to the GAAB for SGS-level appeals. Any extension is within the discretion of the GDAAC chair, or the GAAB, as appropriate, where the view is that compelling reasons exist.

### Note B: Informal mediation is available via the SGS Vice-Dean at any stage before filing an appeal with the GAAB. Consultation with the SGS Vice-Dean at an early stage is encouraged. In cases where SGS has approved the termination of a student’s registration or in cases where perceived or actual conflict of interest is identified, the student will have access to an alternate informal mediator.

### 11 Policies and Guidelines

Important School of Graduate Studies policies and guidelines affecting graduate students are included in the SGS Calendar. However, there are numerous additional policies and guidelines affecting graduate studies on the SGS website.

Furthermore, University of Toronto-wide policies affecting students are posted on the Governing Council website.

### 11.1 University Assessment and Grading Practices Policy

The University Assessment and Grading Practices Policy sets out the principles and key elements that should characterize the assessment and grading of student work in for-credit programming at the University of Toronto.

For graduate programs and students, any reference to “division/Faculty” should be understood to refer to the School of Graduate Studies, and any reference to department should be understood to refer to the relevant graduate unit.

The School of Graduate Studies is the only division that may develop additional grading regulations and guidelines for graduate studies. Where undergraduate and graduate practices differ, this has been indicated explicitly in the text. Otherwise, all clauses should be understood to apply equally to students at either level of study. Divisions/Faculties may wish to develop procedures for implementing these policies according to their needs. These procedures must be consistent with this policy. In case of conflict or lack of clarity, this policy will be understood to take precedence.

See the full text of the University Assessment and Grading Practices Policy.

### 11.2 Academic Continuity Policy

This policy provides a framework that will guide the University in enhancing its ability to fulfil its academic mission in the face of potential threats to academic continuity. It is intended to apply to circumstances and events that are potential threats to the continuity of the academic operations of the University and relates entirely to the principles and processes that should guide the University in this context. It applies to instances when the academic continuity of one or more programs, one or more departments or Faculties, one or more campuses, or the whole University is disrupted and changes need to be made to the normal academic operations of the University.

See the full text of the Policy on Academic Continuity.
11.3 Intellectual Property

The University believes that all contributors to the successful realization of new technologies and knowledge should share fairly and appropriately in the benefits. For details and further information, visit [www.research.utoronto.ca](http://www.research.utoronto.ca).

11.4 Research Ethics

The University's [Policy on Ethical Conduct in Research](#) requires each academic division to formulate its own guidelines. The divisional guidelines apply to graduate students enrolled in graduate units within those Faculties. For details and further information, visit [www.research.utoronto.ca](http://www.research.utoronto.ca).

11.5 Policy on Academic Sanctions for Students Who Have Outstanding Obligations to the University

Academic sanctions are applicable to any student who has an outstanding obligation to the University. Recognized obligations are as follows:

1. tuition fees
2. academic and other incidental fees
3. residence fees and other residence charges
4. library fines
5. bookstore accounts
6. loans made by colleges, Faculties, or the University
7. health service accounts
8. unreturned or damaged instruments, materials and equipment
9. orders for the restitution, rectification, or the payment of damages, fines, bonds for good behaviour, and requirement of public service work imposed under the authority of the [Code of Student Conduct](#).

See the full text of the [Policy on Academic Sanctions for Students Who Have Outstanding University Obligations](#).

11.6 Code of Behaviour on Academic Matters

The [Code of Behaviour on Academic Matters](#) addresses the responsibilities of all students and faculty to the integrity of the teaching and learning experience.

See the full text of the [Code of Behaviour on Academic Matters](#).

11.7 Policy on Sexual Violence and Sexual Harassment

The [Policy on Sexual Violence and Sexual Harassment](#) protects students, faculty, and staff from sexual harassment within the University community.

See the full text of the [Policy on Sexual Violence and Sexual Harassment](#).

11.8 Code of Student Conduct

Non-academic offences are defined in the University's [Code of Student Conduct](#). The Code addresses offences, procedures, interim conditions and measures, and sanctions.

See the full text of the [Code of Student Conduct](#).

11.9 Access to Official Student Academic Records

Academic records of students are ultimately the property of the University. The [Guidelines Concerning Access to Official Student Academic Records](#) establishes University-wide aims, objectives, criteria, and procedures that apply to the academic records of students.

See the full text of the [Guidelines Concerning Access to Official Student Academic Records](#).

The School of Graduate Studies will withhold access to statements of results and transcripts of students, alumni, and former students who have outstanding debts or obligations to the University in accordance with the [Policy on Academic Sanctions for Students Who Have Outstanding University Obligations](#). The School of Graduate Studies will not release the official diploma to such persons nor will it provide written or oral certifications of degree on their behalf.

11.10 Transcript Policy

This policy sets out the principles that underpin the University’s understanding of its official academic transcript and to describe the minimum information that the transcript must include. The academic transcript is the primary, official, consolidated record of a student’s academic performance and achievement.

University of Toronto consolidated transcripts are limited to degree-level studies.

See the full text of the [Transcript Policy](#).

11.11 Policy on Official Correspondence with Students

The University and its divisions may use the postal mail system and/or electronic message services (e.g., electronic mail and other computer-based online correspondence systems) as mechanisms for delivering official correspondence to students. Official correspondence may include, but is not limited to, matters related to students' participation in their academic programs, important information concerning University and program scheduling, fees information, and other matters concerning the administration and governance of the University.

Students are responsible for maintaining and advising the University — via the University's student information system (currently ACORN) — of a current and valid postal address as well as the address for a University-issued electronic mail account that meets a standard of service set by the Vice-President and Provost.
Failure to do so may result in a student missing important information and will not be considered an acceptable rationale for failing to receive official correspondence from the University.

The University provides centrally supported technical services and the infrastructure to make electronic mail and/or online communications systems available to students. University correspondence delivered by electronic mail is subject to the same public information, privacy, and records retention requirements and policies as are other University correspondence and student records. The University's expectations concerning use of information and communication technology are articulated in the guidelines on Appropriate Use of Information and Communication Technology.

Students are expected to monitor and retrieve their mail, including electronic messaging account(s) issued to them by the University, on a frequent and consistent basis. Students have the responsibility to recognize that certain communications may be time critical. Students have the right to forward their University-issued electronic mail account to another electronic mail service provider address but remain responsible for ensuring that all University electronic message communication sent to the official University-issued account is received and read.

See the full text of the Policy on Official Correspondence with Students.

11.12 Policy on the Framework on Off-Campus Safety

The Policy on the Framework on Off-Campus Safety is designed to provide University staff and faculty involved in the planning and execution of University-related off-campus activities with a set of core planning principles with respect to safety.

See the full text of the Policy on the Framework on Off-Campus Safety.

Students are also encouraged to review the Guidelines on Safety in Field Research produced by the Office of Environmental Health and Safety.

11.13 Statement on Appropriate Use of Information and Communication Technology

The University of Toronto provides guidelines on the appropriate use of information and communication technology (ICT) within the University community. ICT resources are made available for all employees, students, and other members of the University community, but remain the property of the University. Users are expected to limit their use to the performance of University-related activities, although a reasonable allowance will be made for personal use. Users should not have an expectation of complete privacy in using the University's ICT and related services.

See the full text of the Appropriate Use of Information and Communication Technology.
Degree Regulations

All degree students are accepted under the General Regulations of the School of Graduate Studies.

All degree program students are subject to both the General Regulations and Degree Regulations in this calendar. In particular, note section 7 of the General Regulations, Good Academic Standing and Satisfactory Academic Progress, Time Limits, Supervision, and Candidacy.

The University of Toronto offers graduate programs leading to doctoral and master's degrees. Numerous degree types are offered in a variety of programs in multiple graduate units. Degree types that are specific to one graduate program are listed below with a link to details contained in the graduate unit entry. See Programs by Graduate Unit.

12 Doctoral Degrees

The University of Toronto offers programs of study leading to five doctoral degrees:

- Doctor of Philosophy (PhD)
- Doctor of Education (EdD)
- Doctor of Juridical Science (SJD)
- Doctor of Musical Arts (DMA)
- Doctor of Nursing (DN)

Degrees offered in multiple programs are listed first, followed by degrees specific to one graduate program.

12.1 Doctor of Philosophy (PhD)

The PhD is offered in a variety of programs in multiple graduate units. For specific admission and program requirements, consult graduate unit entries. The Graduate Education Council of the School of Graduate Studies has recommended that all graduate units offering the PhD degree design a four-year program that can be completed on a full-time basis by a student who holds a master's degree in a discipline appropriate to the intended field of study. Where graduate units are aware that it may be difficult for students to complete their PhD programs within four years, they should include a statement to that effect in their calendar entries. Where students are not able to complete all degree requirements within four years, all requirements for the degree must be completed within six years from first enrolment.

12.1.1 Admission Requirements

12.1.1.1 Four-Year PhD Program

Students admitted to this program require an appropriate master's degree with at least B+ standing from a recognized university in a discipline deemed appropriate for the intended field of study.

A student who is admitted on condition that the requirements for an acceptable master's degree at another university are completed may be permitted conditional registration, unless this is excluded by the terms of the letter of admission. A student who is conditionally registered must submit to the graduate unit, not later than January 31 of the first year of enrolment, official verification of completion of the requirements for the master's degree. If verification is not submitted by that date, additional requirements may be added to the PhD program. See further information in section 4 of General Regulations, Admission Regulations and Procedures.

12.1.1.2 Five-Year PhD Program (Referred to as "Direct-Entry")

Students admitted to this program, where offered, require an appropriate bachelor's degree with at least A– standing from a recognized university in courses in a discipline deemed appropriate for the intended field of study. Students who hold a master's degree in a discipline deemed not appropriate or require further preparation would normally be admitted to this program.

12.1.1.3 Flexible-Time PhD Program Option

Applicants may apply to a flexible-time PhD program option in a graduate unit offering such an option that has been approved through University of Toronto governance. Details are found in each program entry; see Programs by Graduate Unit. Applications to flexible-time PhD program options are subject to the SGS General Regulations and Degree Regulations and must meet the same admission requirements as applicants to the full-time PhD program.

In addition, applicants to the flexible-time PhD program option must demonstrate that they are "practising professionals"; that is, they are active professionals who are engaged in work activities that may include consulting, community organizing, self-employment, contractual work, or equivalent.

Applicants to the flexible-time PhD program option must demonstrate:

1. that the research and proposed program of study is related to the applicant's professional work and vice versa;
2. that they will continue to be professionally engaged while registered in the program.

12.1.2 Program Requirements

PhD students must register for every successive session, including summers, on a full-time basis following the first session of registration unless granted a leave of absence. The minimum degree fee is based on one academic year, that is, three consecutive sessions. All PhD students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to these PhD degree requirements and those of the graduate unit in which the student is registered. See also Flexible-Time PhD Program Option, below.

12.1.2.1 Four-Year PhD Program

Most PhD applicants are admitted to a four-year PhD program based on the completion of an appropriate master's degree as detailed in the admission requirements section above and the
General Regulations section. Where graduate units are aware that it may be difficult for students to complete their PhD programs within four years, they have been asked to include a statement to that effect in their calendar entries. Where students are not able to complete all degree requirements within four years, all requirements for the degree must be completed within six years from first enrolment.

12.1.2.2 Five-Year PhD Program (Direct-Entry)

Graduate units may offer a five-year PhD program, approved through University of Toronto governance. Qualified students may be admitted into a five-year PhD program (direct-entry) based on the completion of an appropriate bachelor’s degree as detailed in the admission requirements section above and in the General Regulations. See the above section 12.1.1.2 Five-Year PhD Program (Direct-Entry) Admission Requirements.

Students in a direct-entry PhD program will register full-time. Five-year PhD program requirements will include:

- The program requirements for the four-year PhD program;
- A substantial portion of the requirements for the master’s degree;
- Additional requirements may be required by the graduate unit;
- Achieving acceptable minimum grades or averages for Year 1 courses;
- Students must be in Good Academic Standing at the end of Year 1.

Other than the requirements stated here, the five-year PhD program differs from the four-year PhD program requirements only in the additional first year of the program and related effects to timing of other PhD program components.

12.1.2.3 Flexible-Time PhD Program Option

Graduate units may offer a flexible-time PhD program option, approved through University of Toronto governance. Such a program option is offered where there is sufficient demand by practising professionals in related fields. The design and delivery of a flexible-time PhD program option permits continued employment by the student in areas related to the student's field of research, except for short specified periods of time. In these programs, theory and praxis uniquely engage and inform each other. See further information in Degree Regulations, Admission Requirements section 12.1.1.3 Flexible-Time PhD Program Option.

The flexible-time PhD program option differs from the full-time PhD program only in design and delivery. Students in a flexible-time PhD program option will register full-time during the first four years and part-time during subsequent years in the program. Students are required to be registered for every successive session, including summers, following the first session of registration unless granted a leave of absence. Each graduate unit offering a flexible-time PhD option will identify a program length for students in the option, which normally will be five or six years.

The time limit, between six and eight years, will be established through the graduate unit practice. Transfers between the full-time PhD program and the flexible-time PhD program option are not permitted. Students in the flexible-time option must satisfy the SGS General Regulations and Degree Regulations in the SGS Calendar, including good academic standing, supervision, and candidacy regulations.

12.1.2.4 Approval

The graduate unit must approve a student's program of study and research.

12.1.2.5 Program

Specific program requirements are set by the graduate units and are found in their respective entries. The thesis topic and the name of the supervisor must be submitted by the middle of the first session in Year 2. Graduate units may, at their discretion, require an earlier date.

12.1.2.6 Language Requirement

Individual graduate units may require that students have an adequate knowledge of such language or languages, other than English, in order to complete the degree program. (See individual graduate unit entries for specific requirements.)

Testing and certification of languages may be administered by the appropriate language department or by the student's own graduate unit.

The graduate unit in which the student is registered is responsible for ensuring that an appropriate certificate of language competence is recorded in the official student file.

12.1.2.7 Achieving Candidacy: Requirements and Time Limit

See General Regulations, section 7 on Good Academic Standing for detailed requirements.

12.1.2.8 Thesis

The candidate, through the graduate unit, shall present a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from the major field. The thesis, which is a piece of scholarly writing, shall constitute a significant contribution to the knowledge of the field and must be based on research conducted while registered for the PhD program.

A thesis should have a coherent topic with an introduction presenting the general theme of the research and a conclusion summarizing and integrating the major findings. A common thesis format reflects the original conception of a thesis as a "book" presenting the candidate's research project. This traditional format is organized as a single narrative describing the research problem, the context of the research, the methods used, the findings, and the conclusions.

The publication-based thesis (PBT), also referred to as the manuscript or article-based thesis, is a coherent work consisting of a number of scholarly publications focusing on the same research problem. The PBT, which takes many forms, generally includes an introductory section, the publishable manuscripts, and a cumulative discussion or conclusion chapter. To promote coherence, the introduction and cumulative concluding chapters
clearly explain how these separate manuscripts fit together into a unified body of research. All doctoral theses must contain a written component; however, other elements may be included in addition to the written text. Some examples of other elements that may be included with the written text are films or videos, electronically interactive word/image-based texts, poems, novels or sections of a novel, play scripts, short stories, documentation of performances, or pieces of art. A thesis must be prepared in a standard format (see National Library guidelines and Guidelines for the Preparation of Theses).

The thesis should normally be written in English, but with the permission of the School of Graduate Studies, a graduate unit may permit or require students in that unit to write the thesis in French.

In Division I, the Humanities, permission may be given for a thesis to be written in a language other than English or French when the language has been approved for use in theses by the graduate unit concerned. Before such permission can be granted, the graduate unit chair must certify in writing to the School of Graduate Studies that the candidate has passed a supervised essay type examination, written in English, which demonstrates the candidate’s proficiency in writing correct and idiomatic English prose. A supplementary abstract of about 5,000 words in English or French must form part of a thesis that is written in a language other than English or French. No language other than English or French may be used for the conduct of Doctoral Final Oral Examinations.

See also General Regulations sections 8.2 Doctoral and Master’s Supervision and 8.4 Submission of Theses.

12.1.2.9 Final Oral Examination

All students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

12.1.2.10 Time for Completion of Degree

All requirements must be completed within six years from first enrolment for the four-year PhD program and within seven years for the five-year PhD program. In exceptional circumstances, a candidate who has failed to complete all the requirements for the degree within this period may be considered for a maximum of four one-year extensions. See General Regulations section 6.1.11 Extension of Time for Completion of Degree Requirements, Doctoral Students.

1. Normally, a minimum of one Fall session and one Winter session of full-time study must be taken consecutively, i.e., Fall session (September to December) followed by Winter session (January to April) or Winter session (January to April) followed by Fall session (September to December).
2. In most programs, students may begin their studies on a part-time basis.
3. Eight half courses are required for students who have an MEd or MA degree or the equivalent in the same area of specialization proposed at the doctoral level.

An eight half-course EdD program should include at least four half courses in the home graduate unit except as otherwise stated in graduate unit program descriptions.

1. Students in some graduate programs may be required to take a comprehensive examination. Consult the specific graduate unit entry for details.

For flexible-time PhD program option, see section 12.1.3 Flexible-Time PhD Program Option.

12.2 Doctor of Education (EdD)

The EdD program is offered in a variety of programs in multiple graduate units within the Ontario Institute for Studies in Education (OISE). The EdD program is designed to provide opportunities for more advanced study for those already engaged in a career related to education.

All students are subject to rules and regulations outlined in the General Regulations section, including section 7 on Good Academic Standing requirements, in addition to these degree requirements and those of the graduate unit in which the student is registered. See specific admission and program requirements in the Programs by Graduate Unit section.

All students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines. In exceptional circumstances, a candidate who has failed to complete all the requirements for the degree within the time limit of six years may be considered for a maximum of four one-year extensions. See 6.1.11 Extension of Time for Completion of Degree Requirements.

Students who have not completed the degree requirements before the six-year time limit or by the end of the extension period may not enrol further.

12.2.1 Admission Requirements

Students admitted to this program require an appropriate master’s degree with at least B+ standing from a recognized university in a discipline deemed appropriate for the intended field of study.

A student may be enrolled in one of the following graduate units:

- Applied Psychology and Human Development
- Leadership, Higher and Adult Education
- Social Justice Education

12.2.2 Program Requirements

For specific program and registration requirements, see the Programs by Graduate Unit section of this calendar.

1. Students in some graduate programs may be required to take a comprehensive examination. Consult the specific graduate unit entry for details.
2. Students undergo an SGS Final Oral Examination on the content and implications of the thesis to determine the adequacy of both the thesis and its defence by the student.
3. All requirements for the EdD must be completed within six years of first enrolment as an EdD student.

12.2.3 EdD Thesis (Dissertation in Practice)

The EdD candidate, through the graduate unit, shall present a thesis (professional doctoral thesis in practice), which is the culminating component of the Doctor of Education degree. The professional doctoral thesis in practice shall include a presentation of a problem of practice, the application of theory and research to the problem of practice, and a design for action to address the problem of practice. It must be the result of original research undertaken while the candidate is a registered student.

A professional doctoral thesis in practice should have a coherent topic, describe a challenge in educational practice, include a review or research literature and/or policy analysis related to the challenge, as well as the investigation of the challenge and/or possible solution(s) to address the challenge. It should have direct implications for policy and/or practice and uphold common standards of high quality (well written, conceptualized and structured, rigorous and coherent approach to methodology, yield generative impacts in the field). The professional doctoral thesis in practice can take two formats: (1) a traditional format where, similarly to a traditional doctoral thesis, the research problem is a complex problem of practice and the inquiry is presented in an authored, multi-chapter document; (2) a mixed format where the problem of practice and related review and analysis of applicable scholarship and policy is presented in a written research document combined with a practical component, which may take form of, for example, school/community improvement project, organization restructuring plan, policy or guideline, installation, film or website, or other endeavour relevant to the field.

The professional doctoral thesis in practice should normally be written/produced in English, but with the permission of the School of Graduate Studies, a graduate unit may permit or require students in that unit to write the professional doctoral thesis in practice in French.

See General Regulations sections 8.2 and 8.4.

12.2.4 Final Oral Examination

All students must defend the thesis (dissertation in practice) at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

12.3 Doctor of Juridical Science (SJD)

This degree is offered in the Faculty of Law. Admission and program requirements for the degree program are outlined in the Law entry in the Degree and Diploma Programs by Graduate Unit section. All SJD students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the Faculty of Law entry.

All doctoral students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

12.4 Doctor of Musical Arts (DMA)

This degree is offered in the Faculty of Music. Admission and program requirements for the degree program are outlined in the Music entry in the Degree and Diploma Programs by Graduate Unit section. All DMA students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the Faculty of Music entry.

All doctoral students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

12.5 Doctor of Nursing (DN)

This degree is offered in the Lawrence S. Bloomberg Faculty of Nursing. Admission and program requirements for the degree program are outlined in the Nursing Science entry in the Degree and Diploma Programs by Graduate Unit section. All DN students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the Lawrence S. Bloomberg Faculty of Nursing entry.

All doctoral students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

12.6 Doctor of Public Health (DrPH)

This degree is offered by the Dalla Lana School of Public Health. Admission and program requirements for the degree program are outlined in the Public Health Sciences entry in the Degree and Diploma Programs by Graduate Unit section. All DrPH students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the Dalla Lana School of Public Health entry.

All doctoral students must defend a thesis at a Final Oral Examination organized by the graduate unit with the cooperation of SGS. See General Regulations section 8.3 Doctoral Final Oral Examination for detailed requirements and deadlines.

13 Master's Degrees

The University of Toronto offers programs of study leading to the master's degrees listed below. All master's students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the relevant graduate unit entry. Numerous degree types are offered in a variety of programs in multiple graduate units.
Degrees offered in multiple graduate programs are listed first, followed by a chart containing degrees specific to one graduate program.

13.1 Degrees in Multiple Graduate Programs

13.1.1 Master of Arts (MA)

The MA program is offered in a variety of programs in multiple graduate units.

13.1.1.1 Admission Requirements

1. Applicants must hold an appropriate bachelor’s degree with high academic standing from a recognized university.
2. If the master's program is not a continuation of a course of study previously pursued as an undergraduate, or if there are deficiencies in meeting graduate unit admission requirements, prerequisite work may be required and the normal length of program may be extended.

13.1.1.2 Program Requirements

1. Under the direction of a graduate unit, a student must pursue a program of advanced study approved by the graduate unit.
2. All requirements for the MA degree must be satisfactorily completed within 3 years (full-time) or 6 years (part-time) from first enrolment.

Admission and program requirements may vary; consult the individual unit entry for details.

13.1.2 Master of Science (MSc)

The MSc program is offered in a variety of programs in multiple graduate units.

13.1.2.1 Admission Requirements

1. Applicants must hold an appropriate bachelor’s degree with high academic standing from a recognized university.
2. If the master's program is not a continuation of a course of study previously pursued as an undergraduate, or if there are deficiencies in meeting graduate unit admission requirements, prerequisite work may be required and the minimum length of program may be extended.

13.1.2.2 Program Requirements

1. Under the direction of a graduate unit, a student must pursue a program of advanced study approved by the graduate unit.
2. All requirements for the MSc degree must be satisfactorily completed within 3 years (full-time) or 6 years (part-time) from first enrolment.

Admission and program requirements may vary; consult the individual unit entry for details.

13.1.3 Master of Applied Science (MASc)

The MASc program is offered in a variety of programs in multiple graduate units. The MASc degree is intended primarily for those who wish to prepare for a career in research and/or plan to continue their graduate studies through the PhD degree.

13.1.3.1 Admission Requirements

1. Applicants must hold the degree of Bachelor of Applied Science or an equivalent degree in engineering. An applicant having an appropriate bachelor’s degree in science or applied mathematics may be admitted as a student by the graduate unit concerned.

A student may be enrolled in one of the following graduate units:

- Aerospace Studies
- Biomedical Engineering
- Chemical Engineering and Applied Chemistry
- Civil and Mineral Engineering
- Earth Sciences
- Electrical and Computer Engineering
- Materials Science and Engineering
- Mechanical and Industrial Engineering

13.1.3.2 Program Requirements

1. Under the direction of a graduate unit, a student must pursue a program of study approved by the graduate unit. Normally, the program will include not more than three full-year courses or equivalent and the preparation of a research thesis, the latter being the major requirement.
2. All requirements for the MASc degree must be satisfactorily completed within 3 years (full-time) or 6 years (part-time) from first enrolment.

Admission and program requirements may vary; consult the individual unit entry for details.

13.1.4 Master of Education (MEd)

The MEd program is offered in a variety of programs in multiple graduate units.

13.1.4.1 Admission Requirements

1. Applicants must hold an appropriate bachelor’s degree from a recognized university, completed with standing equivalent to a mid-B or better in the final year.
2. A year of professional education for teaching, or the equivalent in pedagogical content, is helpful.
3. Normally, at least one year of relevant, successful, professional experience is required.
4. A student may be enrolled in one of the following graduate units:
   - Applied Psychology and Human Development
   - Curriculum, Teaching and Learning
13.1.4.2 Program Requirements

The minimum program requirements for the MEd degree are as follows:

1. Under the direction of a graduate unit, a student must pursue a program of advanced study approved by the graduate unit, which in addition to coursework may include a major research paper or a comprehensive examination requirement. Each individual graduate unit calendar entry specifies the options available for each MEd degree.
2. The MEd degree program requires that a minimum of half of the courses must be taken in the home department unless otherwise specified by the department.
3. All requirements for the MEd degree must be satisfactorily completed within 3 years (full-time) or 6 years (part-time) from first enrolment.

Admission and program requirements may vary; consult the individual unit entry for details.

13.1.5 Master of Engineering (MEng)

The MEng program is offered in a variety of programs in multiple graduate units. The MEng degree is intended primarily for those who wish to pursue advanced study at the master's level, which is especially suited for professional practice.

13.1.5.1 Admission Requirements

1. Applicants must hold the degree of Bachelor of Applied Science or an equivalent degree in engineering. An applicant having an appropriate bachelor's degree in science or applied mathematics may be admitted as a student by the graduate unit concerned.

A student may be enrolled in one of the following graduate units:

- Aerospace Studies
- Biomedical Engineering
- Chemical Engineering and Applied Chemistry
- Civil and Mineral Engineering
- Electrical and Computer Engineering
- Materials Science and Engineering
- Mechanical and Industrial Engineering

13.1.5.2 Program Requirements

1. Under the direction of a graduate unit, a student must pursue a program of study approved by the graduate unit. The program will be equivalent in weight to full-time study for at least two sessions (eight months), and may include a project in addition to lecture and laboratory courses.
2. There is no general residence requirement for the degree. However, a period of residence may be required, depending on the individual student's program and experience. This required period will be as recommended by the graduate unit and approved by the School of Graduate Studies, but must not exceed two sessions.
3. The MEng degree program must be completed within 3 years (full-time) or 6 years (part-time) from first enrolment.

Admission and program requirements may vary; consult the individual unit entry for details.

13.1.6 Master of Health Science (MHSc)

The MHSc program is offered in a variety of programs in multiple graduate units. Admission and program requirements vary; consult the individual unit entry for details.

- Biomedical Engineering
- Health Policy, Management and Evaluation
- Laboratory Medicine and Pathobiology
- Medical Science
- Speech-Language Pathology
- Translational Research in the Health Sciences

13.2 Degrees in Single Graduate Programs

Each of the following degrees is offered in an individual graduate unit and program. Admission and program requirements for the degree program vary and are outlined in the applicable entry in the Programs by Graduate Unit section of this calendar, unless otherwise noted. All master's students are subject to rules and regulations outlined in the General Regulations, including section 7 on Good Academic Standing requirements, in addition to the degree requirements specified in the relevant graduate unit entry.

The degree names are listed alphabetically; visit the relevant graduate unit web page where the degree program is described.

<table>
<thead>
<tr>
<th>Degree Name</th>
<th>Degree Abbreviation</th>
<th>Graduate Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Professional Master of Laws</td>
<td>GPLLLM</td>
<td>Law</td>
</tr>
<tr>
<td>Master of Architecture</td>
<td>MArch</td>
<td>Architecture, Landscape, and Design</td>
</tr>
<tr>
<td>Master of Biotechnology</td>
<td>MBiotech</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Business Administration</td>
<td>MBA</td>
<td>Management, Rotman School of</td>
</tr>
<tr>
<td>Master of Engineering in Cities Engineering and Management</td>
<td>MEngCEM</td>
<td>Civil and Mineral Engineering</td>
</tr>
<tr>
<td>Master of Environmental Science</td>
<td>MEnvSc</td>
<td>Physical and Environmental Sciences</td>
</tr>
<tr>
<td>Program Name</td>
<td>Code</td>
<td>Full Name</td>
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<tr>
<td>-----------------------------------------------------</td>
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</tr>
<tr>
<td>Master of Environment and Sustainability</td>
<td>MES</td>
<td>Environment</td>
</tr>
<tr>
<td>Master of Finance</td>
<td>MF</td>
<td>Management, Rotman School of</td>
</tr>
<tr>
<td>Master of Financial Economics</td>
<td>MFE</td>
<td>Financial Economics</td>
</tr>
<tr>
<td>Master of Financial Insurance</td>
<td>MFI</td>
<td>Statistical Sciences</td>
</tr>
<tr>
<td>Master of Financial Risk Management</td>
<td>MFRM</td>
<td>Management, Rotman School of</td>
</tr>
<tr>
<td>Master of Forensic Accounting</td>
<td>MFAcc</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Forest Conservation</td>
<td>MFC</td>
<td>Forestry</td>
</tr>
<tr>
<td>Master of Global Affairs</td>
<td>MGA</td>
<td>Global Affairs and Public Policy</td>
</tr>
<tr>
<td>Master of Health Informatics</td>
<td>MHI</td>
<td>Health Policy, Management and Evaluation</td>
</tr>
<tr>
<td>Master of Industrial Relations and Human Resources</td>
<td>MIRHR</td>
<td>Industrial Relations and Human Resources</td>
</tr>
<tr>
<td>Master of Information</td>
<td>MI</td>
<td>Information</td>
</tr>
<tr>
<td>Master of Landscape Architecture</td>
<td>MLA</td>
<td>Architecture, Landscape, and Design</td>
</tr>
<tr>
<td>Master of Laws</td>
<td>LLM</td>
<td>Law</td>
</tr>
<tr>
<td>Master of Management and Professional Accounting</td>
<td>MMPA</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Management of Innovation</td>
<td>MMI</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Mathematical Finance</td>
<td>MMF</td>
<td>Mathematical Finance</td>
</tr>
<tr>
<td>Master of Museum Studies</td>
<td>MMSt</td>
<td>Information</td>
</tr>
<tr>
<td>Master of Music</td>
<td>MMus</td>
<td>Music</td>
</tr>
<tr>
<td>Master of Nursing</td>
<td>MN</td>
<td>Nursing Science</td>
</tr>
<tr>
<td>Master of Professional Kinesiology</td>
<td>MPK</td>
<td>Kinesiology</td>
</tr>
<tr>
<td>Master of Public Health</td>
<td>MPH</td>
<td>Public Health Sciences</td>
</tr>
<tr>
<td>Master of Public Policy</td>
<td>MPP</td>
<td>Global Affairs and Public Policy</td>
</tr>
<tr>
<td>Master of Science in Applied Computing</td>
<td>MScAC</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Master of Science in Biomedical Communications</td>
<td>MScBMC</td>
<td>Medical Science</td>
</tr>
<tr>
<td>Master of Science in Community Health</td>
<td>MScCH</td>
<td>Public Health Sciences</td>
</tr>
<tr>
<td>Master of Science in Forestry</td>
<td>MScF</td>
<td>Forestry</td>
</tr>
<tr>
<td>Master of Science in Occupational Therapy</td>
<td>MScOT</td>
<td>Occupational Science and Occupational Therapy</td>
</tr>
<tr>
<td>Master of Science in Pharmacy</td>
<td>MScPhm</td>
<td>Pharmaceutical Sciences</td>
</tr>
<tr>
<td>Master of Science in Physical Therapy</td>
<td>MScPT</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>Master of Science in Planning</td>
<td>MScPI</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Master of Science in Sustainability Management</td>
<td>MScSM</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Social Work</td>
<td>MSW</td>
<td>Social Work</td>
</tr>
<tr>
<td>Master of Studies in Law</td>
<td>MSL</td>
<td>Law</td>
</tr>
<tr>
<td>Master of Teaching</td>
<td>MT</td>
<td>Curriculum, Teaching and Learning</td>
</tr>
<tr>
<td>Master of Urban Design</td>
<td>MUD</td>
<td>Architecture, Landscape, and Design</td>
</tr>
<tr>
<td>Master of Urban Innovation</td>
<td>MUI</td>
<td>Management &amp; Innovation</td>
</tr>
<tr>
<td>Master of Visual Studies</td>
<td>MVS</td>
<td>Architecture, Landscape, and Design</td>
</tr>
</tbody>
</table>
Fee Regulations

14.1 Schedule of Fees

The annual Schedule of Fees, updated each year in June, is available on the Student Accounts website, studentaccount.utoronto.ca.

14.2 Fees and Registration

Students are informed of fees payable online through ACORN (www.acorn.utoronto.ca).

University of Toronto students normally pay tuition fees from a Canadian Bank account, with a Canadian dollar denominated Mastercard or Visa credit card, or with Higher Ed Points. Fee options for making a fee payment within Canada are found on the Student Accounts website. Holders of certain scholarships, awards, research assistantships, teaching assistantships, or loans may request to register without payment through their graduate unit.

To be registered, students must pay at least the Minimum Payment to Register Amount displayed on their current session ACORN invoice or have an approved request to register without payment in place before the SGS registration deadline. By virtue of being registered, a student thereby agrees to abide by all of the academic and non-academic policies, rules, and regulations of the University of Toronto, the School of Graduate Studies, and the graduate unit in which the student is registered.

14.3 Academic Fees Structure

Because the course of study in many graduate units is program/student specific and often cannot be described in terms of a specific number of courses, and because graduate education more often than not results from the sum of experience encountered during the program, School of Graduate Studies fees are assessed on a program basis rather than on the number of courses taken.

Degree students and special students who pay the full-time fee for the previous Fall or Winter session do not pay fees for the Summer session. However, part-time special students pay Summer fees. In addition, part-time degree students who register for the Summer session, but who have not registered in both sessions of the previous academic year, pay Summer fees.

A degree program is defined on a sessional basis and the full fee is charged regardless of the number of courses taken. All students (except special students not proceeding to a degree) are accepted into a program with a defined program length (see General Regulations section 5.3 Program Length). This period establishes the minimum degree fee that must be paid before graduation.

14.4 Minimum Degree Fee

14.4.1 Master’s Programs

The minimum degree fee is the academic fee associated with the program length for each graduate master’s program and represents the minimum amount of academic fees that every student, regardless of registration option or status, must pay upon completion of the program prior to graduation. Full-time program length is associated with the minimum degree fee that is based on the Fall session as the start of the program, even if some students commence the program in the Winter or Summer session.

14.4.2 Balance of Degree Fee

Master’s students who finish the degree program requirements in less time than the defined program length, regardless of registration option, will be subject to a balance of degree fee. The balance of degree fee is the minimum degree fee minus program fees already paid by the student. The balance of degree fee is assessed just prior to graduation. The payment due date for the balance of degree fee is three months from the student’s convocation. If the fee is unpaid, students are charged the monthly service fee of 1.5% compounded (19.56% per annum).

For international students who change to domestic status during their study period, the minimum degree fee will be assessed as follows:

- if the legal status change occurred within the program length, the minimum degree fee will be based on the domestic program fee;
- if the legal status change occurred after the program length, the minimum degree fee will be based on the international program fee.

14.4.3 Doctoral Programs

The minimum degree fee for PhD and professional doctoral programs is the academic fee associated with one year (three sessions) of full-time studies and represents the minimum amount of academic fees that every PhD or professional doctoral student, regardless of registration status or option, must pay upon completion of the program prior to graduation.

All students are subject to tuition and fees for each session and year of registration, including sessions following the defined program length, until the program is completed.

14.4.4 Degree or Special (Non-degree) Students

The SGS-approved transfer of graduate academic credit as a degree or special (non-degree) student does not alter or reduce the required minimum degree fee.
14.5 Full-Time Student Fee

The full-time student fee is the fee charged to a full-time student. See also: Minimum Degree Fee above; Fees for Final-Year Doctoral Students below; and Fees for Students on Extension below, regarding fees for graduate students on extension.

14.6 Dual Registrations

Dual registrants will be required to maintain their registration for the master's degree, register also for the PhD degree, and pay only the appropriate PhD fees.

14.7 Full-Time Students Commencing a Degree Program in January

Students commencing a degree program in January will pay half the appropriate fee for the year.

14.8 Summer Students

Students commencing a degree program in the Summer and taking courses will pay the Summer session fee. These fees are in addition to the annual fees which will be assessed in September.

Students commencing a degree program in September but who start research in the preceding Summer do not pay fees for the Summer session. Continuing degree students and special students who pay the full-time fee for the previous Fall or Winter session do not pay fees for the Summer session. However, part-time special students pay Summer fees. In addition, part-time degree students who register for the Summer session but who have not registered in both sessions of the previous academic year pay Summer fees.

Students returning in the Summer session from an approved leave (see General Regulations section 6.1.15 Leave Policy) do not pay Summer session fees.

14.9 Part-Time Degree Students

Students undertaking their studies on a part-time basis are required to pay the part-time academic and incidental fees each year they register until the completion of their program. See also Minimum Degree Fee above.

14.10 Flexible-Time PhD Degree Students

Students undertaking a flexible-time PhD program are required to pay full-time academic and incidental fees during the first four years of the program and may pay part-time academic and incidental fees thereafter up to the time limit for the degree.

Extensions are permitted under existing policy: students granted an extension may register full-time or part-time and pay fees accordingly.

14.11 Special Students

Full-time special students pay the full academic fee per session. Special students enrolling on a part-time basis will pay for each course or half course. Fees paid as a special student cannot be applied to any subsequent degree program.

Refund dates are different for part-time special students. For details, visit the Student Accounts website.

14.12 International Students

Certain categories of international students are charged academic fees equal to those for Canadian citizens and permanent residents. For more information and to see whether you may be eligible for an international fee exemption, please consult the Student Accounts website.

If an international student's status in Canada changes during a session, exemption from the higher fees may be granted. The fees will be adjusted in the current session, provided the status change occurs before November 1 in the Fall session or before February 1 in the Winter session.

Status changes with supporting documents must be reported to the SGS Student Academic Services Office prior to the above deadlines. However, if a status change effective before these dates is reported with a minor delay, a fee adjustment may still be possible.

14.13 Incidental Fees

Compulsory incidental fees are charged for the Graduate Students’ Union, Health Services, Hart House, the Athletic Centre, and other student services. See the University’s Policy for Compulsory Non-Academic Incidental Fees.

14.14 Minimum Required Payment

Students have the option to make payments on a sessional basis.

The Fall-Winter minimum required payment consists of any arrears plus Fall session tuition fees.

For students registering in the Winter session only, the minimum required payment consists of arrears plus Winter session tuition fees.

For students registering in the Summer session only, and for students starting in the Summer session, the minimum required payment consists of arrears plus 50% of Summer session tuition fees.

For details regarding fee payment and service charge billing deadlines, students should visit University of Toronto Student Accounts.
Students should check [ACORN](#) for account balances and details to avoid service charges.

14.15 Service Charges

If not paid in full, any outstanding account balance, regardless of the source of payment, is subject to a monthly service charge of 1.5% compounded (19.56% per annum). This is the case even if students have registered without payment on the basis of an Ontario Student Assistance Program (OSAP) or other provincial government loan, a US government loan, or University funding package.

For details regarding fee payment and service charge billing deadlines, students should visit [University of Toronto Student Accounts](#).

Students should check [ACORN](#) for account balances and details to avoid service charges.

14.16 Late Registration

Any student registering after the deadline date specified in the academic calendar (sessional dates) is required to pay a late registration fee of $44.

14.17 Fees for Graduating Master's Students

Master's students who are recommended for graduation by the deadline date for Fall Convocation will not be assessed fees for the Fall session. Master's students who miss this deadline are required to register for the Fall session and pay the appropriate fees.

14.18 Fees for Final-Year Doctoral Students

Doctoral student academic fees for the final year will be pro-rated, based on a 12-month academic year, for the number of months that elapse between September and (including) the month in which the final thesis (including corrections required by the Final Oral Examination committee) is submitted to the School of Graduate Studies. Fees for the final month will not be charged if the requirements are met before the 16th day of the month. Incidental and ancillary fees will be charged per session and are not pro-rated monthly.

Academic fees for the final extension year will be pro-rated, based on 50% of the domestic fee for the 12-month academic year, for the number of months that elapse between September and (including) the month in which the thesis (including corrections required by the Final Oral Examination committee) is submitted to the School of Graduate Studies. Fees for the final month will not be charged if the requirements are met by the 15th day of the month. Incidental and ancillary fees will be charged per session and are not pro-rated monthly.

14.19 Fees for Students on Extension

All full-time graduate students on extension, both domestic and international, will be registered as full-time students and charged an academic fee equal to 50% of the domestic fee and full-time incidental and ancillary fees during each year of extension. Part-time students will pay the relevant part-time, incidental, and ancillary fees.

14.20 Reinstatement Fees

Reinstated students in programs requiring continuity of registration must pay a reinstatement fee equivalent to the academic fee owing for any session(s) in which they did not register, including program extension session(s), as well as the appropriate fee for the current year.

Academic fees charged for sessions before the time limit will be assessed at 100% of the annual academic fee according to the program delivery option (full-time or part-time) and student status (domestic or international).

Academic fees charged during the program extension period for full-time students will be calculated at the rate of 50% of the annual domestic fee, for both domestic and international students, plus full-time incidental and ancillary fees and the University Health Insurance Plan (UHIP), if applicable.

Part-time students are charged the relevant part-time academic fees during the program extension period plus part-time incidental and ancillary fees and UHIP, if applicable.

Reinstated students in programs not requiring continuity of registration are charged academic fees plus incidental and ancillary fees and UHIP, if applicable, for the year in which they are reinstated.

See also General Regulations section 6.1.10 Failure to Register.

14.21 Outstanding Fees and Charges

See General Regulations section 11.5 Policy on Academic Sanctions for Students Who Have Outstanding Obligations to the University.

14.22 Receipts for Income Tax

Tuition Fee Certificates are available online from [ACORN](#).

14.23 Transcripts

A $15 fee is charged for each copy of a transcript of record. These fees are subject to change.

Transcripts will not be issued for students whose fees are in arrears.

Transcripts may be ordered online from [ACORN](#) or at the University of Toronto Transcript Centre, 172 St. George Street, Toronto, Ontario M5R 0A3.
Financial Support

15.1 Graduate Funding

The University of Toronto gives high priority to graduate financial support. For doctoral-stream students in the funded cohort, graduate units provide base funding at the beginning of each year. Students in professional-stream graduate programs typically self-fund their education and rely on student loans and lines of credit. Students may be eligible for a limited number of graduate awards available through their graduate units and various external agencies. For more information about graduate funding and award opportunities for graduate students, visit the Awards and Funding section of the SGS website.

Students are encouraged to contact their graduate unit or the SGS Graduate Awards Office for information about financial assistance.

15.2 Admission Awards

SGS administers a number of awards to meritorious incoming graduate students. During the admissions process, students may automatically be considered and nominated by their home graduate unit for some awards while other awards require an application. For more information on admission awards, visit the Admission Awards section of the SGS website.

15.3 Graduate Awards

SGS administers many awards from sources internal and external to the University of Toronto (e.g., awards established through SGS, federal, provincial, and external agencies). Some competitions require that the student’s application be submitted to the graduate unit or to SGS for consideration, while other applications must be sent directly to the awarding institution.

Current award opportunities with detailed information for applicants are identified in the Awards and Funding section of the SGS website.

15.4 Awards for International Students

In addition to any internal departmental funding that may be available to international students in the funded cohort, there are a number of other funding sources listed on the SGS website. International students are also encouraged to investigate and apply for all possible funding opportunities provided by their home country. For more information on these awards and other funding opportunities, visit the International Awards section of the SGS website.

15.5 Government Student Assistance Program and Financial Aid

The federal and provincial governments provide financial support to qualified students who are Canadian citizens or permanent residents. The loan and grant amounts depend on a student’s assessed financial need. Information on the Ontario Student Assistance Program (OSAP) and other government aid is available on the U of T Enrolment Services’ web page. Students who receive government loans may also qualify for the University of Toronto Advance Planning for Students (UTAPS) grant.

15.6 Teaching and Research Assistantships

Some graduate units offer teaching and/or research assistantship opportunities as a component or outside a student funding package. Teaching assistants may be assigned teaching tasks such as conducting tutorials, grading undergraduate essays and exams, and acting as a resource for undergraduate students. Research assistants normally work with a faculty member, assisting with research projects.

For more information, write to the chair of your graduate unit, giving full particulars of your academic training and experience.

15.7 SGS Financial Aid and Advising Programs

Financial advising is available through SGS to assist students with managing educational expenses, budgeting, and planning. Financial advising staff can provide information and direction on various financial aid programs such as student loans, grants, and other resources available. Graduate students facing sudden and unanticipated financial need may be eligible for SGS emergency financial assistance programs. Financial advising is confidential, free of charge, and normally available in person, by email, or phone, video, and teleconferencing. Visit the Financial Aid and Advising section of the SGS website.

Emergency Grant Program

The SGS Emergency Grant Program assists currently registered, full-time graduate students who encounter a sudden and unanticipated serious financial emergency. This is not considered to be a source of routine or long-term funding or serve to address general unmet need.

Emergency Loan Program

The SGS Emergency Loan Program alleviates temporary cash flow problems for registered graduate students who are expecting to receive a University-issued payment in the near future. The average loan is approximately $1,000 to $1,500, but may be approved for a larger amount. Loans are interest free until the mutually agreed upon repayment date up to 120 days.

Accessibility Grant Program

The Accessibility Grant Program assists currently registered, full-time graduate students with academic accommodations necessary to meet unexpected needs arising from the particular demands of their graduate program. Though students are expected to plan for long-term assistance, the grant can assist with short-term essential educational expenses that are not normally covered by the student, the graduate unit, provincial or...
federal agencies. Students must apply for this grant through Accessibility Services.

Contact

Graduate Awards Office
School of Graduate Studies
University of Toronto
63 St. George Street
Toronto, Ontario M5S 2Z9
Canada

Graduate Awards
Telephone: (416) 946-0808
Email: graduate.awards@utoronto.ca

Financial Aid and Advising
Telephone: (416) 978-2839
Email: sgs.financial.assistance@utoronto.ca
Graduate Programs

This section contains a listing of graduate programs offered by the School of Graduate Studies at the University of Toronto. It is divided into three categories, by program type:

- Degree and diploma programs by graduate unit
- Combined degree programs
- Collaborative specializations

SGS comprises approximately 80 graduate units, 140 combined degree programs, 10 dual degree programs, and 40 collaborative (interdisciplinary) specializations.

Within each program type, entries are listed alphabetically with an introduction (including overview and contact), a list of programs offered (including admission and program requirements), and courses.

For further details about a program, visit the graduate unit’s website, listed in the contact information.
A diverse range of research-oriented and professional programs are offered at both the master’s and doctoral levels. A limited number of graduate diploma programs are also offered.
Aerospace Studies

Aerospace Studies: Introduction

Faculty Affiliation
Applied Science and Engineering

Degree Programs

Aerospace Science and Engineering

MASc

- Emphases:
  - Aerial Robotics;
  - Robotics;
  - Sustainable Aviation;
  - Sustainable Energy

MEng

- Emphases:
  - Advanced Manufacturing;
  - Aerial Robotics;
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  - Robotics;
  - Sustainable Aviation;
  - Sustainable Energy

PhD

- Emphases:
  - Aerial Robotics;
  - Robotics;
  - Sustainable Aviation;
  - Sustainable Energy

Overview

Aerospace science and engineering is a cross-disciplinary and multidisciplinary field that allows exploration of the broadest and most fascinating fields of engineering, areas that capture the imagination and encourage exploration beyond our terrestrial existence. The University of Toronto Institute for Aerospace Studies (UTIAS) is Canada’s leader for education and research in aerospace engineering, focusing on the technical fields needed to design aircraft and spacecraft. Faculty perform research in the following areas:

- Aeronautics: Aircraft design, systems, and control
- Experimental methods: Laser diagnostics, structural/material analysis, field testing of robotics and aircraft
- Flight simulation: Full motion-based flight simulation with virtual reality capability
- Fluid dynamics: Flow of gasses over aircraft and in engines
- Numerical methods: Computer modeling for fluid flows, structures, design, and optimization
- Orbital mechanics: Satellite/spacecraft dynamics and control
- Propulsion systems: Jet and rocket engines, turbomachinery, combustion science
- Robotics and autonomous systems: Ground, air and space-based systems
- Spacecraft design and construction: Design, construction, and launch of satellites
- Structures and materials: Structural design and optimization, material testing.

Much of this research falls into three main themes:

- Reducing the environmental impact of aviation
- Aerial robotics, drones and unmanned aerial vehicles
- Autonomous systems for space exploration.

Contact and Address

Web: www.utias.utoronto.ca
Telephone: (416) 667-7700
Fax: (416) 667-7799

University of Toronto Institute for Aerospace Studies
4925 Dufferin Street
Toronto, Ontario M3H 5T6
Canada

Aerospace Studies: Graduate Faculty

Full Members

Barfoot, Tim - BASc, PhD
Chaudhuri, Swetaprovo - BE, PhD
D’Eleuterio, Gabriele - BASc, MASc, PhD
Damaren, Christopher - BASc, MASc, PhD
Davis, James - BASc, MASc, PhD
Ekmekci, Alis - BS, MS, PhD
Emami, M.R. - BSc, MSc, PhD
Gottlieb, James - BSc, MS, PhD
Grant, Peter - BASc, MASc, PhD
Groth, Clinton - BASc, MASc, PhD
Gulder, Omer - BSc, MSc, PhD
Kelly, Jonathan - BSc, MS, MSc, PhD
Lavoie, Philippe - BSE, MSc, PhD (Associate Director, Research)
Liu, Hugh - BSc, MASc, PhD
Nair, Prasanth - BTech, MTech, PhD (Associate Director, Graduate Studies)
Schoellig, Angela - Diplng, MSc, PhD, PhD
Steves, Craig - BA, BASc, PhD
Steinberg, Adam - BASc, MSc, PhD
Waslander, Steven - BSE, MS, PhD
Zee, Robert - BASc, MASc, PhD
Zingg, David - BASc, MASc, PhD
Members Emeriti

DeLaurier, James - BS, MS, PhD, FCASI
Stangeby, Peter - BSc, MSc, PhD

Aerospace Studies: Aerospace Science and Engineering: MASc

Master of Applied Science

Program Description

The MASc degree is a research-based program focused on the completion of a research thesis. The MASc is considered to provide basic training in research for students subsequent to an undergraduate program. Under the direction of a faculty supervisor, students will select a research topic, perform experiments, computation, or analysis relevant to the topic, and report their results in a thesis. Upon completion of the thesis, students will be prepared for further academic research or employment in industry, including in research and development settings. Top students may have the opportunity to transfer directly to the PhD program after their first year of MASc studies.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS’s additional admission requirements stated below.
- An appropriate four-year undergraduate degree in engineering, mathematics, physics, or chemistry from a recognized university.

Program Requirements

- Coursework to be completed in Year 1. Students must complete a minimum of 2.5 full-course equivalents (FCEs) (five half courses) as follows:
  - All courses must be technical.
  - At least half of the required FCEs must be courses offered at UTIAS.
  - Complete AER1800H Research Seminar in Aerospace Science and Engineering (0.5 FCE).
  - Students must achieve at least a B- average to be in good academic standing. Failure in any course taken for credit may result in termination of the student’s registration.
  - Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 2.5 FCEs.
- Complete the non-credit course JDE1000H Ethics in Research (0.0 FCE).
- Attend a total of 12 approved seminars.
- Have research performance assessed by a Research Assessment Committee (RAC), which includes the student’s supervisor. For students making excellent research progress, the RAC may recommend that a student be considered for direct transfer to the PhD program.
- Write a thesis based on research performed during the period of registration for the MASc based on a topic selected in consultation with the student’s supervisor.
- Present a seminar on the student’s research at the UTIAS Departmental MASc Seminar (DMS).
- Students have the option of completing an emphasis in Aerial Robotics; Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Aerospace Studies: Aerospace Science and Engineering: MEng

Master of Engineering

Program Description

The Master of Engineering (MEng) is a course-based program designed to lead to employment in the aerospace industry. Students select from the wide range of UTIAS courses, as well as courses offered by other University of Toronto departments, to create a personalized curriculum. Students can also opt to follow one of several emphases, which provide more concentrated teaching in a specific area, and which are recorded on the student’s transcript.

The MEng program can be taken on a full-time, extended full-time, or part-time basis. Transfer between the full-time, extended full-time, and part-time options is not permitted after registration. The default registration is the extended full-time option.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS’s additional admission requirements stated below.
- An appropriate bachelor of applied science degree in engineering, or an equivalent four-year degree from a recognized undergraduate engineering program.
Program Requirements

- **Coursework.** Completion of **5.0 full-course equivalents (FCEs)** (10 half courses) as follows:
  - A minimum of seven half courses (3.5 FCEs) must be technical.
  - A minimum of half the courses must be offered at UTIAS.
  - A maximum of three 500-level courses (1.5 FCEs) is permitted.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's registration.
  - Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 5.0 FCEs. A maximum of 5.5 FCEs may be taken; permission must be granted by the graduate office to exceed 5.0 FCEs.
  - Students must complete all the required courses within six sessions (two years).
- Once students are registered, transfer between the full-time, extended full-time, or part-time option is not permitted.
- Students have the option of completing an emphasis in Advanced Manufacturing; Aerial Robotics; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

- Applicants holding an appropriate bachelor of applied science degree in engineering are considered for admission under the General Regulations of the School of Graduate Studies.
- An appropriate bachelor of applied science degree in engineering, or an equivalent four-year degree from a recognized undergraduate engineering program.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** (10 half courses).
  - A minimum of seven half courses (3.5 FCEs) must be technical.
  - A maximum of three 500-level courses (1.5 FCEs) is permitted.
  - A maximum of three half courses (1.5 FCEs) may be taken in any session.
  - A maximum of six half courses (3.0 FCEs) may be taken in any academic year.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's registration.
  - Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 5.0 FCEs. A maximum of 5.5 FCEs may be taken; permission must be granted by the graduate office to exceed 5.0 FCEs.
  - Students must complete all the required courses within six sessions (two years).
- Once students are registered, transfer between the full-time, extended full-time, or part-time option is not permitted.
- Students have the option of completing an emphasis in Advanced Manufacturing; Aerial Robotics; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

6 sessions (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS's additional admission requirements stated below.
- An appropriate bachelor of applied science degree in engineering, or an equivalent four-year degree from a recognized undergraduate engineering program.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** (10 half courses).
  - A minimum of seven half courses (3.5 FCEs) must be technical.
  - A maximum of three half courses (1.5 FCEs) may be taken in any session.
  - A maximum of six half courses (3.0 FCEs) may be taken in any academic year.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's registration.
  - Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 5.0 FCEs. A maximum of 5.5 FCEs may be taken; permission must be granted by the graduate office to exceed 5.0 FCEs.
  - Students must complete all the required courses within six sessions (two years).
- Once students are registered, transfer between the full-time, extended full-time, or part-time option is not permitted.
- Students have the option of completing an emphasis in Advanced Manufacturing; Aerial Robotics; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.
Aerospace Studies: Aerospace Science and Engineering: PhD

Doctor of Philosophy

Program Description

The Doctor of Philosophy degree is a research-based program leading to the production of a research thesis. Doctoral research at UTIAS is expected to be internationally recognized for its originality, rigour, and importance. Supervised by a faculty member, students select a research topic, develop a plan to address the topic, and implement this plan, leading to a major research thesis and contributions to the academic literature. This is the pinnacle of academic achievement, and holders of the PhD are well prepared for academic positions and leadership roles in industrial research and development.

Applicants may enter the PhD program via one of two routes: 1) following completion of an MASc degree in engineering, mathematics, physics, or chemistry; 2) transfer from the University of Toronto MASc program. The program can also be taken on a flexible-time basis.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS's additional admission requirements stated below.
- An MASc degree in engineering, mathematics, physics, or chemistry and demonstrated ability to perform advanced research.

Program Requirements

- Students must maintain full-time, continuous registration for every session, including the Summer session, until all degree requirements are completed.
  - Students starting with an MASc degree must spend a minimum of two years in the PhD program.
  - Students with an MASc in a discipline relevant to the field of PhD study are expected to complete the PhD program in less than four years.
- Coursework. Students must complete a minimum of 2.0 full-course equivalents (FCEs) (four half courses) in Years 1 and 2.
  - All courses must be technical.
  - At least half of the required FCEs must be courses offered at UTIAS.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's candidacy.
- Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 2.0 FCEs.
- Students must complete the non-credit course JDE1000H Ethics in Research (0.0 FCE) (a half-day workshop).
- Students must attend a total of 24 approved seminars.
- Students undertake a program of research under the guidance of a Doctoral Examination Committee (DEC), which includes the student's supervisor and two other UTIAS professors. The DEC shall:
  - Ascertain the suitability of the student for advanced research
  - Assess the thesis topic
  - Conduct formal reviews of the student’s thesis progress at least once per year; unsatisfactory progress may result in the termination of the student's registration
  - Determine whether a student qualifies as a candidate for the PhD degree at the second DEC meeting (qualifying DEC), approximately 1.5 years after program start
  - Provide the first assessment of the PhD thesis.
- Students must complete a thesis based upon research carried out during the period of registration for the PhD degree.
- Students must present the thesis work at a seminar at the UTIAS Departmental Doctoral Seminar (DDS).
- Students must defend the thesis at the Doctoral Final Oral Examination pursuant to the SGS Degree Regulations.
- Students must prepare at least one formal manuscript for publication in a refereed journal or refereed conference proceedings.
Students have the option of completing an emphasis in Aerial Robotics; Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

**Program Length**

4 years

**Time Limit**

6 years

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**PhD Program (Transfer)**

**Transfer Requirements**

- Students who have achieved excellent performance in the MASc program at UTIAS at the end of Year 1 are recommended to transfer directly into the PhD program under the same supervisor. Approval for transfer is based on the student’s research ability, research progress during Year 1, and academic standing.

**Program Requirements**

- Students must maintain full-time, continuous registration for every session, including the Summer session, until all degree requirements are completed.
  - Students transferring directly from the MASc program must spend a minimum of three years in the program from the date of initial MASc registration.
  - Students are expected to complete the PhD program in less than five years.
- **Coursework.** Students must complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - 2.5 FCEs already completed during the MASc program.
  - A minimum of 1.0 FCE (two half courses) in the PhD program.
  - At least half of the required FCEs must be courses offered at UTIAS.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student’s registration.
  - All required courses must be completed in the first two years of the program, starting from the initial registration in the MASc program.
- Students must complete the non-credit course JDE1000H Ethics in Research (0.0 FCE) (a half-day workshop).
- Students must attend a total of 24 approved seminars.
- Students undertake a program of research under the guidance of a Doctoral Examination Committee (DEC), which includes the student's supervisor and two other UTIAS professors. The DEC shall:
  - Ascertain the suitability of the student for advanced research
  - Assess the thesis topic

- Conduct formal reviews of the student's thesis progress at least once per year; unsatisfactory progress may result in the termination of the student's registration
- Determine whether a student qualifies as a candidate for the PhD degree at the second DEC meeting (qualifying DEC), approximately 1.5 years after program start
- Provide the first assessment of the PhD thesis.
- Students must present the thesis work at the UTIAS Departmental Doctoral Seminar (DDS)
- Students must defend the thesis at the Doctoral Final Oral Examination pursuant to the SGS Degree Regulations.
- Students must prepare at least one formal manuscript for publication in a refereed journal or refereed conference proceedings.
- Students have the option of completing an emphasis in Aerial Robotics; Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

**Program Length**

5 years

**Time Limit**

7 years

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**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS's additional admission requirements stated below.
- Applicants must have a four-year undergraduate degree in engineering, mathematics, physics, or chemistry.
- Applicants are expected to have achieved grades averaging the equivalent of a University of Toronto A– or better in their last full year of study.

**Program Requirements**

- Students must maintain full-time, continuous registration for every session, including the Summer session, until all degree requirements are completed.
  - Students must spend a minimum of three years in the direct-entry PhD program.
  - Students are expected to complete the direct-entry PhD program in less than five years.
- **Coursework.** Students must complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - At least half of the required FCEs must be courses with AER or ROB designators.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student’s candidacy.
- All required courses must be completed in the first two years of the program.
- All courses must be technical.
  - Students must complete the non-credit course JDE1000H Ethics in Research (0.0 FCE) (a half-day workshop).
  - Students must attend a total of 24 approved seminars.
  - Students must undertake a program of research under the guidance of a Doctoral Examination Committee (DEC), which includes the student’s supervisor and two other UTIAS professors. The DEC shall:
    - Ascertain the suitability of the student for advanced research
    - Conduct formal reviews of the student's thesis progress at least once per year; unsatisfactory progress may result in the termination of the student's registration
    - Determine whether a student qualifies as a candidate for the PhD degree at the second DEC meeting (qualifying DEC), approximately 1.5 years after program start
    - Provide the first assessment of the PhD thesis.
  - Students must present the thesis work at a seminar at the UTIAS Departmental Doctoral Seminar (DDS).
  - Students must defend the thesis at the Doctoral Final Oral Examination pursuant to the SGS Degree Regulations.
  - Students must prepare at least one formal manuscript for publication in a refereed journal or refereed conference proceedings.
  - Students have the option of completing an emphasis in Aerial Robotics; Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's candidacy.
- Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 2.0 FCEs.
  - Students must complete the non-credit course JDE1000H Ethics in Research (0.0 FCE) (a half-day workshop).
  - Students must attend a total of 24 approved seminars.
  - Students must undertake a program of research under the guidance of a Doctoral Examination Committee (DEC), which includes the student's supervisor and two other UTIAS professors. The DEC shall:
    - Ascertain the suitability of the student for advanced research
    - Assess the thesis topic
    - Conduct formal reviews of the student’s thesis progress at least once per year; unsatisfactory progress may result in the termination of the student’s registration
    - Determine whether a student qualifies as a candidate for the PhD degree at the second DEC meeting (qualifying DEC), approximately 24 months after program start
    - Provide the first assessment of the PhD thesis.
  - Students must complete a thesis based upon research carried out during the period of registration for the PhD degree.
  - Students must present the thesis work at a seminar at the UTIAS Departmental Doctoral Seminar (DDS).
  - Students must defend the thesis at the Doctoral Final Oral Examination pursuant to the SGS Degree Regulations.
  - Students must prepare at least one formal manuscript for publication in a refereed journal or refereed conference proceedings.
  - Students have the option of completing an emphasis in Aerial Robotics; Robotics; Sustainable Aviation; or Sustainable Energy as part of their degree program. Please see details in the Aerospace Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

5 years

Time Limit

7 years

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy UTIAS’s additional admission requirements stated below.
- An MASc degree in engineering, mathematics, physics, or chemistry and demonstrated ability to perform advanced research.

Program Requirements

- Students must maintain full-time, continuous registration for the first four years of study. Part-time registration is expected for the remaining period of study within the normal length.
- Students starting with an MASc degree must spend a minimum of two years in the PhD program.
- Students with an MASc in a discipline relevant to the field of PhD study are expected to complete the PhD program in less than six years.
- Coursework. Students must complete a minimum of 2.0 full-course equivalents (FCEs) (four half courses) in Years 1 and 2 as follows:
  - All courses must be technical.
  - At least half of the required FCEs must be courses offered at UTIAS.
  - Students must achieve at least a B– average to be in good academic standing. Failure in any course taken for credit may result in termination of the student's candidacy.
  - Students deemed to have insufficient background may be required to complete supplementary coursework in addition to the required 2.0 FCEs.
  - Students must complete the non-credit course JDE1000H Ethics in Research (0.0 FCE) (a half-day workshop).
  - Students must attend a total of 24 approved seminars.
  - Students undertake a program of research under the guidance of a Doctoral Examination Committee (DEC), which includes the student's supervisor and two other UTIAS professors. The DEC shall:
    - Ascertain the suitability of the student for advanced research
    - Assess the thesis topic
    - Conduct formal reviews of the student’s thesis progress at least once per year; unsatisfactory progress may result in the termination of the student’s registration
    - Determine whether a student qualifies as a candidate for the PhD degree at the second DEC meeting (qualifying DEC), approximately 24 months after program start
    - Provide the first assessment of the PhD thesis.

Program Length

6 years

Time Limit

8 years
Aerospace Studies: Aerospace Science and Engineering: MASc, MEng, PhD Emphases

Emphasis: Advanced Manufacturing (MEng only)

MEng students must successfully complete:

- Four half courses (2.0 full-course equivalents [FCEs]), including at least one core course.
- Elective courses may include other core courses, and courses from either of two streams: Manufacturing Engineering and Manufacturing Management.

Core Courses

AER501H Advanced Mechanics of Structures  
AER1403H Advanced Aerospace Structures  
APS1028H Operations and Production Management for Manufacturing and Services  
CHE1123H Liquid Biofuels  
MIE519H Advanced Manufacturing Technologies  
MIE1740H Smart Materials and Structures.

Elective Courses — Manufacturing Engineering


Elective Courses — Manufacturing Management


Emphasis: Aerial Robotics (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- 1.0 full-course equivalent [FCE]: AER1216H Fundamentals of Unmanned Aerial Vehicles and AER1217H Development of Autonomous Unmanned Aerial Systems;
- one other course from the approved course list, which will be updated on a regular basis, or other related courses approved by professors; and
- one MASc or PhD thesis relevant to unmanned aerial vehicles.

MEng students must successfully complete:

- 1.0 full-course equivalent [FCE]: AER1216H Fundamentals of Unmanned Aerial Vehicles and AER1217H Development of Autonomous Unmanned Aerial Systems;
- one other course from the approved course list, which will be updated on a regular basis, or other related courses approved by professors; and
- one MEng project course related to unmanned aerial vehicles.

Elective Courses


Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.

Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)'s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.

Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcript should contact the Faculty Graduate Studies office.

Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):
Leadership


Entrepreneurship and Innovation


Finance and Management


Engineering and Society

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.

Emphasis: Robotics (MASc, MEng, PhD)

Students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least two of the following groups, and no more than two in any given group:

Group 1: Planning and Control


Group 2: Perception and Learning


Group 3: Modelling and Dynamics

AER506H, AER1503H, AER1512H, JEB1444H, MIE1001H.

Group 4: Systems Design and Integration


Emphasis: Sustainable Aviation (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- AER1315H (0.5 FCE).
- A thesis in an area of relevance to sustainable aviation with approval of the Scientific Committee.

MEng students must successfully complete:

- AER1315H (0.5 FCE).

Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from either of the following lists below.
- A thesis towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- Four half courses (2.0 FCEs) from either of the following lists below, including at least one core course (0.5 FCE).

Core Courses

APS1032H Introduction to Energy Project Management
MIE515H Alternative Energy Systems
MIE1120H Current Energy Infrastructure and Resources.

Elective Courses

Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.

Aerospace Studies: Aerospace Science and Engineering: MASc, MEng, PhD Courses

This list represents course offerings at the time of publication. Course descriptions are available on the UTIAS website. Courses marked (PR) have prerequisites.

**Aircraft Flight Systems**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AER0503H</td>
<td>Aeroelasticity</td>
</tr>
<tr>
<td>AER1202H</td>
<td>Advanced Flight Dynamics</td>
</tr>
<tr>
<td>AER1211H</td>
<td>Human Control of Flight Systems</td>
</tr>
<tr>
<td>AER1216H</td>
<td>Fundamentals of Unmanned Aerial Vehicles</td>
</tr>
<tr>
<td>AER1217H</td>
<td>Development of Autonomous Unmanned Aerial Systems (prerequisite: AER1216H)</td>
</tr>
</tbody>
</table>

**Aerodynamics, Fluid Dynamics, and Propulsion**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>AER0510H</td>
<td>Aerospace Propulsion</td>
</tr>
<tr>
<td>AER1301H</td>
<td>Kinetic Theory of Gases</td>
</tr>
<tr>
<td>AER1303H</td>
<td>Advanced Fluid Mechanics (PR)</td>
</tr>
<tr>
<td>AER1304H</td>
<td>Fundamentals of Combustion</td>
</tr>
<tr>
<td>AER1306H</td>
<td>Special Topics in Reacting Flows</td>
</tr>
<tr>
<td>AER1308H</td>
<td>Introduction to Modern Flow Control</td>
</tr>
<tr>
<td>AER1310H</td>
<td>Turbulence Modelling</td>
</tr>
<tr>
<td>AER1311H</td>
<td>Unsteady Gasdynamics</td>
</tr>
<tr>
<td>AER1316H</td>
<td>Fundamentals of Computational Fluid Dynamics</td>
</tr>
<tr>
<td>AER1318H</td>
<td>Topics in Computational Fluid Dynamics</td>
</tr>
<tr>
<td>AER1319H</td>
<td>Finite Volume Methods for Computational Fluid Dynamics</td>
</tr>
<tr>
<td>AER1322H</td>
<td>Modern Aircraft Propulsion (prerequisite: AER0510 or equivalent; undergraduate-level training in compressible flow)</td>
</tr>
<tr>
<td>AER1324H</td>
<td>Introduction to Turbulence (exclusion: MIE1207H)</td>
</tr>
<tr>
<td>AER1326H</td>
<td>Aeroacoustics</td>
</tr>
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</table>

**Structures and Multidisciplinary Optimization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>AER0501H</td>
<td>Advanced Mechanics of Structures</td>
</tr>
<tr>
<td>AER1403H</td>
<td>Advanced Aerospace Structures (PR)</td>
</tr>
<tr>
<td>AER1410H</td>
<td>Topology Optimization</td>
</tr>
<tr>
<td>AER1415H</td>
<td>Computational Optimization</td>
</tr>
<tr>
<td>AER1416H</td>
<td>Numerical Methods for Uncertainty Quantification</td>
</tr>
<tr>
<td>AER1418H</td>
<td>Variational Methods for Partial Differential Equations</td>
</tr>
</tbody>
</table>

**Sustainable Aviation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AER1315H</td>
<td>Sustainable Aviation</td>
</tr>
</tbody>
</table>

**Robotics and Space Systems Engineering**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AER0506H</td>
<td>Spacecraft Dynamics and Control I</td>
</tr>
<tr>
<td>AER0521H</td>
<td>Mobile Robotics and Perception</td>
</tr>
<tr>
<td>AER0525H</td>
<td>Robotics</td>
</tr>
<tr>
<td>AER1503H</td>
<td>Spacecraft Dynamics and Control II</td>
</tr>
<tr>
<td>AER1512H</td>
<td>Multibody Dynamics</td>
</tr>
<tr>
<td>AER1513H</td>
<td>State Estimation for Aerospace Vehicles</td>
</tr>
<tr>
<td>AER1515H</td>
<td>Perception for Robotics (exclusions: AER1514H, ROB1514H)</td>
</tr>
<tr>
<td>AER1516H</td>
<td>Robot Motion Planning</td>
</tr>
<tr>
<td>AER1517H</td>
<td>Control for Robotics</td>
</tr>
<tr>
<td>AER1520H</td>
<td>Microsatellite Design I</td>
</tr>
<tr>
<td>AER1521H</td>
<td>Microsatellite Design II</td>
</tr>
<tr>
<td>ROB1514H</td>
<td>Mobile Robotics</td>
</tr>
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</table>

**Management and Policy**

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<th>Course Title</th>
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<tbody>
<tr>
<td>AER1601H</td>
<td>Aerospace Engineering and Operations Management</td>
</tr>
<tr>
<td>AER1604H</td>
<td>Air Accident Investigation</td>
</tr>
</tbody>
</table>

**Engineering Physics**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>AER0507H</td>
<td>Introduction to Fusion Energy</td>
</tr>
<tr>
<td>AER1717H</td>
<td>Applied Plasma Physics I (reading course)</td>
</tr>
</tbody>
</table>
Research Seminars and Professional Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>AER1800H</td>
<td>Research Seminar in Aerospace Science and Engineering (for first-year MASc students only)</td>
</tr>
<tr>
<td>AER1810H</td>
<td>MEng Project (for MEng students only)</td>
</tr>
<tr>
<td>JDE1000H</td>
<td>Ethics in Research (Students registered in the MASc or PhD programs are required to participate in this non-credit seminar course during their first or second session of registration. This course must be completed in order to graduate.)</td>
</tr>
</tbody>
</table>

Reading Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AER1820H</td>
<td>Directed Reading in Aerospace Studies</td>
</tr>
</tbody>
</table>

APS Engineering Course

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
</tr>
</tbody>
</table>
Anthropology

Anthropology: Introduction

Faculty Affiliation
Arts and Science

Degree Programs

Anthropology

MA and PhD

- Fields:
  - Archaeology;
  - Evolutionary Anthropology;
  - Linguistic and Semiotic Anthropology;
  - Medical Anthropology;
  - Sociocultural Anthropology

MSc

- Fields:
  - Archaeology;
  - Evolutionary Anthropology;
  - Medical Anthropology

Collaborative Specializations
The following collaborative specializations are available to students in participating degree programs as listed below:

- Aging, Palliative and Supportive Care Across the Life Course
  - Anthropology, MA, MSc, PhD
- Contemporary East and Southeast Asian Studies
  - Anthropology, MA
- Development Policy and Power
  - Anthropology, MA, MSc
- Diaspora and Transnational Studies
  - Anthropology, MA, MSc, PhD
- Environmental Studies
  - Anthropology, MA, MSc, PhD
- Ethnic, Immigration and Pluralism Studies
  - Anthropology, MA, PhD
- Food Studies
  - Anthropology, MA, PhD
- Global Health (U of T Global Scholar)
  - Anthropology, PhD
- Indigenous Health
  - Anthropology, MA, MSc, PhD
- Jewish Studies
  - Anthropology, MA, PhD
- Mediterranean Archaeology
  - Anthropology, PhD

- Sexual Diversity Studies
  - Anthropology, MA, MSc, PhD
- South Asian Studies
  - Anthropology, MA, MSc, PhD
- Women and Gender Studies
  - Anthropology, MA, MSc, PhD
- Women’s Health
  - Anthropology, MA, MSc, PhD

Overview

Anthropology is concerned with the unity, diversity, and evolution of humanity (and non-human primates) and of human culture and society from a comparative and global perspective. The Department of Anthropology was established in 1936 and has included many of the most prominent figures in Canadian anthropology. The first MA degree was awarded in 1949; the first PhD in 1956.

Members of the department conduct research on present and past human societies, cultural knowledge and practice, evolutionary antecedents, and closely related species. Graduate training is offered in socio-cultural, medical, evolutionary/biological, linguistic, and archaeological branches of the field. Anthropology students at the University of Toronto can study human biology and evolution; human behaviour from its first appearance in the archaeological record to the first appearance of writing; language and society; anthropology of health; and the diversity of human culture in today’s world. Since Anthropology concerns the diversity and commonality of humans over time and around the globe, faculty and graduate research is broadly international and varies in method and theoretical frame. Nonetheless, it coheres in the quest to understand past and present human experience in social, cultural, and evolutionary contexts.

Contact and Address

Web: [www.anthropology.utoronto.ca](http://www.anthropology.utoronto.ca)
Email: [anthropology.graduate@utoronto.ca](mailto:anthropology.graduate@utoronto.ca)
Telephone: (416) 978-5416
Fax: (416) 978-3217

Department of Anthropology
University of Toronto
Room 256, 19 Ursula Franklin Street
Toronto, Ontario M5S 2S2
Canada

Anthropology: Graduate Faculty

Full Members

Allen, Andrea - PhD
Bamford, Sandra - BA, MA, MPA, PhD
Banning, Edward - BA, MA, PhD
Barker, Joshua - BA, MA, PhD
Begun, David - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Bozcali, Firt - BA, MA, MA, PhD
The department offers a Master of Arts degree program, both full-time and part-time. The full-time option normally extends over a 12-month period lasting from September to September.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Anthropology’s additional admission requirements stated below.
- B+ average or equivalent.
- Applicants must satisfy the department that they have the appropriate background to enter a particular program of graduate study.
- Two letters of reference.
- A brief statement of interest (not exceeding 1,000 words).

Program Requirements

- **Coursework.** Students must complete 3.5 full-course equivalents (FCEs) including:
  - 0.5 FCE: ANT3047H or ANT4020H or ANT6100H
  - 1.0 FCE: ANT2000Y
  - 2.0 FCEs, of which at least 1.0 FCEs must be in Anthropology
  - Exceptions to coursework requirements must be approved by the advisor and Graduate Coordinator.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 6 sessions part-time
Anthropology: Anthropology MSc

Master of Science

Program Description

The MSc program is most appropriate for students who are considering careers in consulting archaeology, some aspects of medical or forensic anthropology, NGO work, or application to PhD programs in Anthropology at other Canadian universities.

The full-time two-year program is normally completed by the summer of Year 2. The MSc program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Anthropology’s additional admission requirements stated below.
- B+ average or equivalent.
- Applicants must satisfy the department that they have the appropriate background to enter a particular program of graduate study.
- Two letters of reference.
- A brief statement of interest (not exceeding 1,000 words).

Program Requirements

- Coursework. Students must complete 4.5 full-course equivalents (FCEs) including:
  - 0.5 FCE: ANT3047H or ANT4020H or ANT6100H
  - 1.0 FCE: ANT2500Y
  - 3.0 FCEs, of which 1.5 FCEs will normally be science courses in archaeology, evolutionary anthropology, medical anthropology, or related disciplines depending on the student's program
  - Exceptions to coursework requirements must be approved by the advisor and Graduate Coordinator.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
9 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Anthropology: Anthropology PhD

Doctor of Philosophy

Program Description

The Doctor of Philosophy is primarily a research degree. A program of study is designed for each student to ensure competence in a field of research, culminating in the writing of a thesis.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry after completing a bachelor’s degree.

Depending on subfield or area of research, completion of the PhD may take longer than the indicated program length below. See the departmental handbook for details.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Anthropology’s additional admission requirements stated below.
- Admission is offered primarily to excellent students who, by the time of enrolment, have completed a master’s degree in anthropology (or a cognate subject).
- All applicants are expected to have achieved grades averaging the equivalent of a University of Toronto A– or better in their last full year of study. Most successful applicants will have finished or be in the process of completing an MA or MSc.
- Applicants must satisfy the department that they have the appropriate background to enter a particular program of graduate study.
- Two letters of reference.
- A brief statement of interest (not exceeding 1,000 words).
- Applicants must identify departmental members with whom they want to conduct PhD research. The department regrets that it cannot admit students to the PhD program, regardless of their qualifications, unless a supervisor is available.
- Undergraduate students with strong backgrounds in anthropology or relevant disciplines (GPA of 3.70 or above in their last 5.0 full-course equivalents [FCEs]) and who have earned an appropriate bachelor’s degree with a concentration in anthropology or a cognate discipline may apply directly for admission to the PhD program.

Program Requirements

- At the beginning of the academic year, each student will submit, with the SGS enrolment form, a program statement describing his or her plan to meet program requirements.
- A minimum of 3.0 full-course equivalents (FCEs), of which at least 1.5 FCEs are normally in anthropology.
• Attain at least an **A–** average in coursework to continue in the PhD program in good standing.

• Submit research proposal by the end of the second session of Year 2 (e.g., May 1 for students who start in September).

• Before proceeding to **full-time research** (achieving candidacy), students must:
  o Be resident on campus for one year.
  o Complete the minimum of 3.0 FCEs (noted above), of which at least 1.5 FCEs are normally in anthropology.
  o Gain experience in research methods and design; requirement can be filled by completing coursework in methodology or, with the department's assent, undertaking faculty-supervised fieldwork or laboratory research. Each student will normally be involved in fieldwork, in the broad meaning of the term, and in theoretical analysis.
  o Present and defend a **thesis proposal**.
  o Demonstrate an adequate knowledge of at least **one language other than English**, unless their program of study requires the intensive and time-consuming mastery of another research tool; demonstration of adequate language or equivalent knowledge can be accomplished in a variety of ways, a list of which is available in the Department of Anthropology's Graduate Student Handbook.
  o An approved Ethics Protocol for all students working with living organisms and modern human remains.

### Program Requirements

• At the beginning of the academic year, each student will submit, with the SGS enrolment form, a program statement describing his or her plan to meet program requirements.

• Students must complete **5.0 graduate full-course equivalents (FCEs)** as follows:
  o 3.0 FCEs, normally taken in Year 1
  o 2.0 FCEs taken in Year 2, when work on the research proposal is also expected to begin.

• Attain an annual average of **at least A–** to continue in the PhD program in good standing.

• Submit research proposal by the end of the second session of Year 3 (e.g., May 1 for students who start in September).

• Before proceeding to **full-time research** (achieving candidacy), students must:
  o Be resident on campus for one year.
  o Complete the minimum 5.0 FCEs (noted above), of which at least 2.5 FCEs are normally in anthropology.
  o Gain experience in research methods and design; requirement can be filled by completing coursework in methodology or, with the department's assent, undertaking faculty-supervised fieldwork or laboratory research. Each student will normally be involved in fieldwork, in the broad meaning of the term, and in theoretical analysis.
  o Present and defend a **thesis proposal**.
  o Demonstrate an adequate knowledge of at least **one language other than English**, unless their program of study requires the intensive and time-consuming mastery of another research tool; demonstration of adequate language or equivalent knowledge can be accomplished in a variety of ways, a list of which is available in the Department of Anthropology's Graduate Student Handbook.
  o An approved Ethics Protocol for all students working with living organisms and modern human remains.
Anthropology: Anthropology MA, MSc, PhD

Courses

Not all courses are offered every year. Check with the department for the current year’s offerings.

General

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANT1096H</td>
<td>Quantitative Methods I</td>
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<tr>
<td>ANT1099H</td>
<td>Quantitative Methods II</td>
</tr>
<tr>
<td>ANT1155H,Y*</td>
<td>Research (or reading seminar)</td>
</tr>
<tr>
<td>ANT1156H,Y*</td>
<td>Research (or reading seminar)</td>
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<tr>
<td>ANT1157H,Y*</td>
<td>Research (or reading seminar)</td>
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<td>ANT2000Y0</td>
<td>MA Research Paper</td>
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<tr>
<td>ANT2500Y0</td>
<td>MSc Research Paper</td>
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EIP3000H Coordinating Seminar: Ethnic, Immigration and Pluralism Studies (for students in the Ethnic, Immigration and Pluralism Studies collaborative specialization)

* Course that may continue over a program. The course is graded when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Archaeology

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<tbody>
<tr>
<td>JPA1040Y</td>
<td>Advanced Physics and Archaeology</td>
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<tr>
<td>ANT4010H</td>
<td>Archaeology in Contemporary Society</td>
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<tr>
<td>ANT4020H</td>
<td>Archaeology Theory</td>
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<tr>
<td>ANT4025H</td>
<td>Archaeology of Eastern North America</td>
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<td>ANT4026H</td>
<td>Arctic Archaeology</td>
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<tr>
<td>ANT4030H</td>
<td>Artifacts</td>
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<td>ANT4031H</td>
<td>Value</td>
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<td>ANT4038H</td>
<td>Archaeology of Urban Development</td>
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<tr>
<td>ANT4039H</td>
<td>Origin and Nature of Food Producing Societies</td>
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<tr>
<td>ANT4040H</td>
<td>Archaeology of Hunter-Gatherers</td>
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<td>ANT4041H</td>
<td>Landscape Archaeology</td>
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<tr>
<td>ANT4042H</td>
<td>Archaeology of Complex Hunter-Gatherers</td>
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<tr>
<td>ANT4043H</td>
<td>Archaeology of Ritual, Religion, and Ideology</td>
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<tr>
<td>ANT4044H</td>
<td>Interregional Interaction in the Ancient World</td>
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<td>ANT4050H</td>
<td>Zooarchaeology</td>
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Evolutionary Anthropology

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<tr>
<td>ANT4051H</td>
<td>Archaeology and Climate Change</td>
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<tr>
<td>ANT4059H</td>
<td>Anthropological Understanding of Cultural Transmission</td>
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<tr>
<td>ANT4060H</td>
<td>Specific Problems I</td>
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<td>ANT4065H</td>
<td>Specific Problems II</td>
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<td>ANT4066H</td>
<td>Household Archaeology</td>
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<td>ANT4068H</td>
<td>Archaeology of Technology</td>
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<td>ANT4069H</td>
<td>Writing Archaeology</td>
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<td>ANT4070H</td>
<td>Archaeologies of Place, Urbanism, and Infrastructures</td>
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<td>ANT3005H</td>
<td>Advanced Topics in Paleoaanthropology</td>
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<td>ANT3010H</td>
<td>Human Osteology: Theory and Practice</td>
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<tr>
<td>ANT3011H</td>
<td>Palaeopathology</td>
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<td>ANT3031H,Y</td>
<td>Advanced Research Seminar I</td>
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<td>ANT3032H,Y</td>
<td>Advanced Research Seminar II</td>
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<td>ANT3033H,Y</td>
<td>Advanced Research Seminar III</td>
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<td>ANT3034H,Y*</td>
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<tr>
<td>ANT3041H</td>
<td>Evolutionary Perspectives on Growth and Development</td>
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<td>ANT3042H</td>
<td>Advanced Topics in Primate Ecology</td>
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<tr>
<td>ANT3045H</td>
<td>Advanced Topics in Non-Human Primate Evolution</td>
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<tr>
<td>ANT3046H</td>
<td>Paleoenvironmental Primate and Human Evolution</td>
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<tr>
<td>ANT3047H</td>
<td>Evolutionary Anthropology Theory</td>
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<tr>
<td>ANT3048H</td>
<td>Primatological Theory and Methods</td>
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<tr>
<td>ANT3049H</td>
<td>Advanced Seminar in Evolutionary Morphology (prerequisite: ANT3047H)</td>
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<tr>
<td>ANT3050H</td>
<td>Species Concepts and Human Evolution</td>
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<tr>
<td>ANT3438H</td>
<td>Skeletal Trauma and Violence: Theory and Practice</td>
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<td>ANT3439H</td>
<td>Advanced Seminar in Forensic Anthropology</td>
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<tr>
<td>ANT3440H</td>
<td>Molecular Anthropology: Theory and Practice</td>
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* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
### Linguistic and Semiotic Anthropology

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<td>JAL1155H</td>
<td>Language and Gender</td>
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<tr>
<td>ANT5144H</td>
<td>Foundations in Linguistic Anthropology</td>
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<td>ANT5148H</td>
<td>Language, Ideology and Political Economy</td>
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<tr>
<td>ANT5150H</td>
<td>Nation, State, and Language in Francophone Canada</td>
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<tr>
<td>ANT5151H</td>
<td>Metaphor, Language, and Science</td>
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<tr>
<td>JSA5147H</td>
<td>Language, Nationalism, and Post-Nationalism</td>
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### Medical Anthropology

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<td>Medical Anthropology I</td>
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<td>ANT7002H</td>
<td>Medical Anthropology II</td>
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<tr>
<td>ANT7003H</td>
<td>Global Health: Anthropological Perspectives</td>
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### Sociocultural Anthropology

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<td>ANT6003H</td>
<td>Critical Issues in Ethnography I</td>
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<tr>
<td>ANT6004H</td>
<td>Critical Issues in Ethnography II</td>
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<tr>
<td>ANT6006H</td>
<td>Genealogies of Anthropological Thought</td>
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<tr>
<td>ANT6007H</td>
<td>Magic, Science, and Religion</td>
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<td>ANT6014H</td>
<td>Media and Mediation</td>
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<td>ANT6017H</td>
<td>Post-colonial Science Studies and the Cultural Politics of Knowledge Translation</td>
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<tr>
<td>ANT6018H</td>
<td>Approaches to Nature and Culture</td>
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<td>ANT6019H</td>
<td>Anthropology of Neoliberalism</td>
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<tr>
<td>ANT6021H</td>
<td>Political Anthropology: State, Power, and Sovereignty</td>
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<td>ANT6027H</td>
<td>Anthropology of Violence</td>
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<td>ANT6029H</td>
<td>Anthropology of Capitalism</td>
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<td>ANT6030H</td>
<td>Anthropology and the Ethical Imagination</td>
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<tr>
<td>ANT6031H,Y</td>
<td>Advanced Research Seminar I</td>
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<td>ANT6032H</td>
<td>Advanced Research Seminar II</td>
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<td>ANT6032Y</td>
<td>Advanced Research Seminar</td>
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<tr>
<td>ANT6033H,Y</td>
<td>Advanced Research Seminar III</td>
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<td>ANT6034H,Y</td>
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<td>ANT6035H</td>
<td>Advanced Research Seminar</td>
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<td>ANT6036H</td>
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<td>ANT6037H,Y</td>
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<td>ANT6038H,Y</td>
<td>Advanced Research Seminar VIII</td>
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<td>ANT6040H</td>
<td>Research Design and Fieldwork Methods</td>
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<td>ANT6050H</td>
<td>Reading Course</td>
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<tr>
<td>ANT6055H</td>
<td>Anthropology of Subjectivity and Personhood</td>
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<td>ANT6056H</td>
<td>Decolonizing Diversity Discourse: Critical and Comparative Accounts of Multiculturalism and Settler Colonialism</td>
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<tr>
<td>ANT6057H</td>
<td>Anthropology and Literature</td>
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<td>ANT6058H</td>
<td>Anthropology of Normativity</td>
</tr>
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<td>ANT6059H</td>
<td>Anthropology and History</td>
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<tr>
<td>ANT6060H</td>
<td>Anthropology and Indigenous Studies in North America</td>
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<td>ANT6061H</td>
<td>Anthropology of Sexuality and Gender</td>
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<tr>
<td>ANT6062H</td>
<td>Disability Anthropology</td>
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<td>ANT6063H</td>
<td>Anthropology of Infrastructures</td>
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<td>ANT6064H</td>
<td>Evidence and Uncertainty: The Politics of Law and Science</td>
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<td>ANT6065H</td>
<td>Anthropology in/of Troubled Times</td>
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<td>ANT6100H</td>
<td>History of Anthropological Thought</td>
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<td>ANT6150H</td>
<td>Proposing Ethnographic Research</td>
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<tr>
<td>ANT6200H</td>
<td>Ethnographic Practicum</td>
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</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Applied Psychology and Human Development

APHD: Introduction

Faculty Affiliation

Ontario Institute for Studies in Education (OISE)

Degree Programs

Child Study and Education

MA

• Fields:
  o Practice-Based Inquiry in Psychology and Educational Practice;
  o Research-Intensive Training in Psychology and Education (admissions have been administratively suspended)

EdD

• Emphases:
  o Early Learning and Early Years;
  o Mental Health and Wellbeing;
  o Special Education

Counselling and Clinical Psychology

MA

• Fields:
  o Clinical and Counselling Psychology — offered by the Department of Applied Psychology and Human Development, OISE, St. George campus;
  o Clinical Psychology — offered by the Graduate Department of Psychological Clinical Science, University of Toronto Scarborough (UTSC)

PhD

• Fields:
  o Clinical and Counselling Psychology — offered by the Department of Applied Psychology and Human Development, OISE, St. George campus;
  o Clinical Psychology — offered by the Graduate Department of Psychological Clinical Science, University of Toronto Scarborough (UTSC)

Counselling Psychology

MEd

• Fields:
  o Counselling and Psychotherapy;
  o Global Mental Health and Counselling Psychology
    ▪ Dual degree program: MEd (University of Toronto) / MMed (China Medical University);
  o Guidance and Counselling

EdD

• Fields:
  o Counselling and Psychotherapy
  o School Psychology

Developmental Psychology and Education

MA, MEd, and PhD

• Emphases:
  o Early Learning (PhD, flexible-time only)
  o Program Evaluation (MEd only)

School and Clinical Child Psychology

MA and PhD

Combined Degree Programs

• STG, Education and Society (Minor), Honours BA / Child Study and Education, MA
• STG, Education and Society (Minor), Honours BSc / Child Study and Education, MA
• UTM, Exceptionality in Human Learning (Specialist), Honours BSc / Child Study and Education, MA
• UTM, Psychology (Major), Honours BSc / Child Study and Education, MA
• UTM, Psychology (Specialist), Honours BSc / Child Study and Education, MA

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Addiction Studies
  o Counselling and Clinical Psychology, MA, PhD
• Aging, Palliative and Supportive Care Across the Life Course
  o Counselling and Clinical Psychology, MA, PhD
  o Counselling Psychology, MEd, EdD
• Community Development
  o Counselling and Clinical Psychology (Clinical and Counselling Psychology field), MA
  o Counselling Psychology, MEd
• Educational Policy
  o Developmental Psychology and Education, MA, MEd, PhD
• Indigenous Health
  o Counselling and Clinical Psychology, MA, PhD
  o Counselling Psychology, MEd, EdD
Overview

Guided by the highest standards of scholarship and a commitment to equity and social justice, students and faculty in the Department of Applied Psychology and Human Development examine major issues in education, human development, applied psychology and professional practice, answering the critical questions that create action in the professional practice of the hundreds of thousands of teachers, researchers, counsellors, clinical psychologists, professionals, policy makers, leaders, and influencers who are part of the OISE community worldwide.

All programs in the department commence in September.

Contact and Address

Admissions

Initial inquiries regarding admission to graduate studies in the Department of Applied Psychology and Human Development should be made directly to:

Web: www.oise.utoronto.ca/orss
Email: admissions.oise@utoronto.ca
Tel: (416) 978-4300
Fax: (416) 323-9964

Office of the Registrar and Student Services
Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West, Room 8-225
Toronto, Ontario M5S 1V6
Canada

Programs

Web: www.oise.utoronto.ca/aphd
Email: oise.aphd@utoronto.ca

Department of Applied Psychology and Human Development
Ontario Institute for Studies in Education
University of Toronto
252 Bloor Street West, 9th Floor
Toronto, Ontario M5S 1V6
Canada

Applied Psychology and Human Development: Graduate Faculty

Full Members

Andrade, Brendan - PhD
Ansloos, Jeffrey - PhD
Brian, Jessica - BA, MA, PhD
Chen, Becky - BA, MEd, MA, PhD
Chen, Charles - BA, MEd, MA, PhD
Ducharme, Joseph - BA, MPsy, PhD
Ferrari, Michel - BA, MA, PhD
Ganea, Patricia - BA, PhD
Geva, Esther - BA, MA, PhD
Gillis, Roy - BSc, MA, PhD
Goldstein, Abby - BA, MA, PhD
Hamza, Chloe - BA, MA, PhD
Henderson, Joanna - BA, MA, PhD
Jang, Eunice Eunhee - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Lee, Kang - BSc, MEd, PhD
Martinussen, Rhonda - BE, MEd, PhD
McCready, Lance - BA, MA, PhD
Moodley, Roy - BA, MA, PhD
Moss, Joan - BA, MA, PhD
O’Sullivan, Julia - BA, MA, PhD
Pelletier, Janette - AB, BE, MEd, PhD
Perlman, Michal - BA, MA, PhD
Peterson-Badali, Michele - BA, MA, PhD
Pyle, Angela - BA, BEd, MEd, PhD
Schachar, Russell James - MD
Schmuckler, Mark - BA, PhD
Schneider, Margaret - BA, MA, PhD
Scott, Katreena - BA, MA, PhD
Skilling, Tracey - BA, MSc, PhD
Slotta, James - BS, MPsy, PhD
Stermac, Lana - BSc, MA, PhD
Stewart, Suzanne - BA, MA, PhD
Volpe, Richard - BA, MA, PhD
Watson, Jeanne - PhD
Wiener, Judith - BA, MEd, PhD
Willows, Dale - PhD
Woodruff, Earl - MA, PhD (Chair and Graduate Chair)

Members Emeriti

Corter, Carl M. - BA, PhD
Tannock, Rosemary - BSc, MA, PhD

Associate Members

Augimeri, Leena - BA, MEd, PhD
Bertrand, Jane - BA, MEd
Brown, Shelley Lynn - PhD
Cleovoulou, Yiola - BA, BEd, MA, PhD
Cunningham, Todd - BS, MA, PhD
Deacon, Helene - BS, PhD, PhD
Georgiades, Kathy - BA, MSc, PhD
Goodman, Deborah - BA, MSW, DSW
Gottardo, Alexandra - PhD
Halitgan, John - BA, MA, PhD
Hidi, Suzanne - BA, MA, PhD
Jasinska, Kaja - DPhil
Kamenetsky, Stuart - MA, DPhil, PhD
Field: Practice-Based Inquiry (PBI) in Psychology and Educational Practice

The Practice-Based Inquiry (PBI) in Psychology and Educational Practice field of study is for those who wish to become classroom teachers and acquire the skills to continuously grow, improve, and lead. The field is based on the use of collaborative inquiry and data-based decision making to enhance teachers' practice and student learning and success (working cooperatively with colleagues and using data and research findings to meet student needs). This field will provide a foundation in the use of a broad range of information sources to address questions of practice using an inquiry cycle.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
• An appropriate bachelor's degree (usually a four-year degree) with the equivalent of a University of Toronto mid-B or better in the final year.
• Applicants are also expected to have experience working with groups of children, preferably in responsible positions.
• Normally, an interview is required prior to admission.
• A satisfactory vulnerable sector screening (VSS) police check is required prior to having direct contact with students. Without proof of a satisfactory VSS, schools will not allow teacher education candidates to participate in practice teaching.

Program Requirements

• Coursework. Students must complete 11.0 full-course equivalents (FCEs) including practicum placements and an internship as follows:
  • Year 1 — 7.0 FCEs as follows:
    ▪ APD2200Y Child Study: Observation, Evaluation, Reporting, and Research (1.0 FCE).
    ▪ APD2201Y Childhood Education Seminar / (1.0 FCE).
    ▪ APD2210Y Introduction to Curriculum I: Core Areas (1.0 FCE).
    ▪ APD2220Y Teaching Practicum (1.0 FCE): three eight-week, half-day placements in kindergarten, grades 1 to 3, and grades 4 to 6.
    ▪ APD2270Y Introduction to Special Education and Adaptive Instruction (1.0 FCE).
    ▪ APD1226H Foundations in Inquiry and Data-Based Decision Making (0.5 FCE).
  • 1.5 elective FCEs (equivalent to three half courses) chosen from among master's-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments; to be completed during the Spring (May/June) and Summer (July/August) sessions.
  • Students without an undergraduate course in child development must take APD1201H Child and Adolescent Development (0.5 FCE) as an elective.
  • Registration in Year 2 of the program is contingent upon successful completion of all Year 1 work.
Year 2 — 4.0 FCEs as follows:

- APD2211H Theory and Curriculum I: Language and Literacy (0.5 FCE).
- APD2212H Theory and Curriculum II: Mathematics (0.5 FCE).
- APD2214H Curriculum and Pedagogies for Cross-Curricular Teaching (0.5 FCE).
- APD221Y Advanced Teaching Practicum (1.0 FCE), a 12-week full-time internship to be taken in one session.
- APD222H Professional Practice Project: Role A (0.5 FCE). Taken during the internship session of Year 2.
- APD223H Professional Practice Project: Role B (0.5 FCE). Taken during the academic session of Year 2.
- APD2202H Childhood Education Seminar II: Advanced Teaching (0.5 FCE), taken during the internship session of Year 2.

Program Length
5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit
3 years full-time

Field: Research-Intensive Training (RIT) in Psychology and Education

Admissions to this field have been administratively suspended.

The field provides concurrent training in research methods and educational practice for elementary teacher certification, including extensive practicum in classrooms. It supports the development of expertise in scientific examination of educational and psychological issues and highlights the integration between science and classroom practice. RIT students must complete a Major Research Paper (MRP) by April of Year 2 in order to graduate.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development’s additional admission requirements stated below.
- An appropriate bachelor's degree (usually a four-year degree) with the equivalent of a University of Toronto mid-B or better in the final year.
- Applicants are also expected to have strong research experience and experience working with groups of children, preferably in responsible positions.
- Normally, an interview is required prior to admission.
- A satisfactory vulnerable sector screening (VSS) police check is required prior to having direct contact with students. Without proof of a satisfactory VSS, schools will not allow teacher education candidates to participate in practice teaching.

Program Requirements

- Coursework. Students must complete 11.0 full-course equivalents (FCEs) including practicum placements and an internship as follows (although a thesis paper is not required, students must complete a Major Research Paper):
  - Year 1 — 7.0 FCEs as follows:
    - APD2200Y Child Study: Observation, Evaluation, Reporting, and Research (1.0 FCE).
    - APD2201Y childhood Education Seminar I (1.0 FCE).
    - APD2210Y Introduction to Curriculum I: Core Areas (1.0 FCE).
    - APD2220Y Teaching Practicum (1.0 FCE): three eight-week, half-day placements in kindergarten, grades 1 to 3, and grades 4 to 6.
    - APD2270Y Introduction to Special Education and Adaptive Instruction (1.0 FCE).
    - APD1209H Research Methods and Thesis Preparation in AP&HD (0.5 FCE).
    - 1.5 elective FCEs (equivalent to three half courses) chosen from among master’s-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments; to be completed during the Spring (May/June) and Summer (July/August) sessions.
    - Students without an undergraduate course in child development must take APD1201H Child and Adolescent Development (0.5 FCE) as an elective.
    - Registration in Year 2 of the program is contingent upon successful completion of all Year 1 work.
  - Year 2 — 4.0 FCEs as follows:
    - APD2211H Theory and Curriculum I: Language and Literacy (0.5 FCE).
    - APD2212H Theory and Curriculum II: Mathematics (0.5 FCE).
    - APD2214H Curriculum and Pedagogies for Cross-Curricular Teaching (0.5 FCE).
    - APD221Y Advanced Teaching Practicum (1.0 FCE), a 12-week full-time internship to be taken in one session.
    - APD2001Y Major Research Paper (1.0 FCE).
    - APD2202H Childhood Education Seminar II: Advanced Teaching (0.5 FCE), taken during the internship session of Year 2.

Program Length
5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit
3 years full-time
APHD: Child Study and Education EdD

Doctor of Education

Program Description

This professional doctorate is designed to prepare professionals working in the field of education (or a highly related area) to extend their professional knowledge and practice to further develop their ability to be scholar-practitioners within child study. This program aims to provide practitioners with an advanced degree to enable them to engage in innovation, advanced professional practice, and understand how the field of child study can inform decision making in multiple contexts including the classroom.

This degree is designed for practitioners who are working within contexts in which children are served or supported and/or with individuals who support or guide those who work with children (e.g., parents, families, and teachers).

The Doctor of Education (EdD) program is only available on a full-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below. Please note that applicants will be accepted into this degree program every other year.
- A master’s degree: an MA or MEd degree in Education (e.g., Master of Arts in Child Study and Education, Master of Education degree, Master of Teaching degree) with high academic standing (equivalent to a B+ or better) from a recognized university. Applicants with master’s degrees in other disciplines may be eligible to apply for admission, but may have to complete additional courses in developmental psychology and/or child study.
- Letter of Intent: applicants must submit a well-written letter of intent in which they highlight their research interests, provide some insight into the problem of practice they are currently wishing to address, and describe their professional experiences and how these relate to their research interests and proposed problem of practice.
- Normally applicants will have in-depth work experience (i.e., normally a minimum of 3 years of current or recent work experience) in an education-related field within a school or community setting. They should be able to identify how their work environment would be able to support and facilitate their research related to their problem of practice, which is a major outcome of this degree.
- A letter from an employer supporting the potential candidate’s goals and ability to conduct their applied research within the school or community setting is required.
- Applicants who hold an MEd or other non-thesis master’s degree must submit evidence of their ability to identify a research question or problem, to design and conduct a research study or project, and to report the findings or results, all in a rigorous manner. This constitutes a Qualifying Research Paper (QRP) or Major Research Paper (MRP). Applicants who do not have a QRP or MRP must provide a writing sample that highlights their ability to write clearly and analytically about issues in education and/or child study. Examples include a single authored master’s-level course paper, a policy document, or a professional publication.
- Normally, an interview is required prior to admission.

Program Requirements

- **Coursework.** Students must complete a minimum of 4.0 full-course equivalents (FCEs) as follows:
  - APD3301H Issues in Child Study and Education: Research, Policy, and Problems of Practice (RM) (0.5 FCE).
  - APD3302H Advanced Study of Critical Issues in Special Education, Mental Health, and Child Security (0.5 FCE).
  - APD3303H Advanced Study of Tools and Research Methods for Investigating Problems of Practice: Data-Driven Research for Decision-Making (0.5 FCE).
  - APD3304H Research Proposal Development (RM) (0.5 FCE).
  - Two half courses (1.0 FCE) from one of the three emphases: 1) Early Learning and Early Years; 2) Mental Health and Wellbeing; or 3) Special Education. See details on each emphasis below.
  - Research Methods course (select from the list of available research methods courses) (0.5 FCE).
  - APD3305H Systems and Organizational Change (0.5 FCE).
- Students will have successfully reached candidacy once their thesis committee is formed and formal approval of the thesis proposal has been given by the committee.
- The **thesis (Dissertation in Practice)** is the culminating component of the Doctor of Education degree in Child Study and Education that shall include an identification and investigation of a problem of practice, the application of theory and research to problems of practice and/or policy and a design for implementation of ideas arising. Specifically, the thesis (Dissertation in Practice) consists of original research in the form of a written proposal or plan for innovative and impactful educational policy, guideline, advocacy, development project, or activism within an education-related field, aimed at improving practice at local, regional, national, or international levels.
- Students are full-time and must maintain continuous, full-time registration and pay full-time fees until all degree requirements, including the thesis (Dissertation in Practice), are completed.
- Students cannot transfer between the EdD and PhD programs.

Program Length

4 years full-time

Time Limit

6 years
Emphasis: Early Learning and Early Years

This emphasis will allow students to take specialized courses which address social emotional wellbeing in the early years. This emphasis is designed to help students gain a deeper understanding and expertise in early learning and early years while also integrating their knowledge and understanding of special education, security, and child and youth wellbeing.

- **Coursework.** From the following course list, EdD students must successfully complete **1.0 full-course equivalent (FCE)**, which is counted towards the total FCEs required for the student's degree program:
  - APD1211H, APD1249H, APD1272H, APD1280H, APD1286H, APD1299H, APD3273H.

Upon successful completion of the emphasis requirements and degree requirements, students may make a request to the CSE Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

Emphasis: Mental Health and Wellbeing

This emphasis will allow students to take specialized courses which address the mental health of children and/or youth in various settings including the classroom as well as delve into issues of risk and resilience and culture. This emphasis is designed to help students gain a deeper understanding of and expertise in special education, security, and child and youth wellbeing.

- **Coursework.** From the following course list, EdD students must successfully complete **1.0 full-course equivalent (FCE)**, which is counted towards the total FCEs required for the student's degree program:
  - APD1236H, APD1256H, APD1279H, APD1295H, APD1297H, APD3221H, APD3232H, APD5284Y.

Upon successful completion of the emphasis requirements and degree requirements, students may make a request to the CSE Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

Emphasis: Special Education

This emphasis will allow students to take specialized courses that delve into specific domains of special education. This emphasis is designed to help students gain a deeper understanding of and expertise in special education while also considering issues pertaining to security and child and youth wellbeing.

- **Coursework.** From the following course list, EdD students must successfully complete **1.0 full-course equivalent (FCE)**, which is counted towards the total FCEs required for the student's degree program:
  - APD1271H, APD1285H, APD1296H, APD2275H, APD2296H.

Upon successful completion of the emphasis requirements and degree requirements, students may make a request to the CSE Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

APHD: Child Study and Education MA Courses

Year 1 Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD2200Y</td>
<td>Child Study: Observation, Evaluation, Reporting, and Research</td>
</tr>
<tr>
<td>APD2201Y</td>
<td>Childhood Education Seminar I</td>
</tr>
<tr>
<td>APD2210Y</td>
<td>Introduction to Curriculum I: Core Areas</td>
</tr>
<tr>
<td>APD2220Y</td>
<td>Teaching Practicum</td>
</tr>
<tr>
<td>APD2270Y</td>
<td>Introduction to Special Education and Adaptive Instruction</td>
</tr>
<tr>
<td>Plus</td>
<td>PBI field only: APD1226H Foundations in Inquiry and Data-Based Decision Making or RIT field only: APD1209H Research Methods and Thesis Preparation in AP&amp;HD</td>
</tr>
<tr>
<td>Plus</td>
<td>Three elective half courses to be completed during the Spring/Summer session.</td>
</tr>
<tr>
<td>Plus</td>
<td>Full-year religious education course (if interested in teaching in the Roman Catholic separate school board). This course does not count towards the Child Study and Education program requirements. There is a separate fee. Students interested in this option should contact the OISE Continuing and Professional Learning Office for course enrolment information.</td>
</tr>
</tbody>
</table>

**Note:** Students without an undergraduate course credit in child development must take APD1201H *Child and Adolescent Development* as one of their electives.
Year 2 Required Courses

Registration in Year 2 is contingent upon successful completion of all Year 1 work.

Academic Session

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD2211H</td>
<td>Theory and Curriculum I: Language and Literacy</td>
</tr>
<tr>
<td>APD2212H</td>
<td>Theory and Curriculum II: Mathematics</td>
</tr>
<tr>
<td>APD2214H</td>
<td>Curriculum and Pedagogies for Cross-Curricular Teaching (Prerequisite: APD2210Y.)</td>
</tr>
</tbody>
</table>

Plus

- PBI field only: APD2222H Professional Practice Project: Role A and APD2223H Professional Practice Project: Role B
- or
- RIT field only: APD2001Y^0 Major Research Paper

Internship Session

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD2202H</td>
<td>Childhood Education Seminar II: Advanced Teaching</td>
</tr>
<tr>
<td>APD2221Y</td>
<td>Advanced Teaching Practicum</td>
</tr>
</tbody>
</table>

In addition, students must demonstrate knowledge of the Acts and Regulations respecting education in Ontario (addressed in APD2202H).

Recommended Elective Courses

Depending on their career goals, students may wish to select courses and placements to focus on particular areas:

Special Education

Students planning a career in special needs education may consider Special Education as a focused area of study. Such students are strongly encouraged to complete two recommended Special Education electives beyond their core foundation course (APD2270Y).

Early Childhood

Students interested in kindergarten programs may consider Early Childhood as a focused area of study. Such students are strongly encouraged to complete one or more recommended Early Childhood elective course plus an internship in a kindergarten class.

Course List

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services’ course schedule.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1201H</td>
<td>Child and Adolescent Development</td>
</tr>
<tr>
<td>APD1209H</td>
<td>Research Methods and Thesis Preparation in AP&amp;HD</td>
</tr>
<tr>
<td>APD1211H</td>
<td>Psychological Foundations of Early Development and Education</td>
</tr>
<tr>
<td>APD1217H</td>
<td>Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children</td>
</tr>
<tr>
<td>APD1226H</td>
<td>Foundations in Inquiry and Data-Based Decision Making</td>
</tr>
<tr>
<td>APD1256H</td>
<td>Child Abuse: Intervention and Prevention</td>
</tr>
<tr>
<td>APD1271H</td>
<td>Perspectives on Executive Functions in Education: From Theory to Practice</td>
</tr>
<tr>
<td>APD1272H</td>
<td>Play and Education</td>
</tr>
<tr>
<td>APD1280H</td>
<td>Symbolic Development and Learning</td>
</tr>
<tr>
<td>APD1286H</td>
<td>Foundations of Literacy Development for School Age Children</td>
</tr>
<tr>
<td>APD1289H</td>
<td>Multivariate Analysis with Applications (RM)</td>
</tr>
<tr>
<td>APD1294H</td>
<td>Technology, Psychology, and Play</td>
</tr>
<tr>
<td>APD1296H</td>
<td>Assessing School-Aged Language Learners</td>
</tr>
<tr>
<td>APD1298H</td>
<td>Imagination, Reasoning, and Learning</td>
</tr>
<tr>
<td>APD1299H</td>
<td>Language Acquisition and Development in Early Childhood</td>
</tr>
<tr>
<td>APD2001Y^0</td>
<td>Major Research Paper</td>
</tr>
<tr>
<td>APD2200Y</td>
<td>Child Study: Observation, Evaluation, Reporting, and Research</td>
</tr>
<tr>
<td>APD2201Y</td>
<td>Childhood Education Seminar I</td>
</tr>
<tr>
<td>APD2202H</td>
<td>Childhood Education Seminar II: Advanced Teaching</td>
</tr>
<tr>
<td>APD2210Y</td>
<td>Introduction to Curriculum I: Core Areas</td>
</tr>
<tr>
<td>APD2211H</td>
<td>Theory and Curriculum I: Language and Literacy</td>
</tr>
<tr>
<td>APD2212H</td>
<td>Theory and Curriculum II: Mathematics</td>
</tr>
<tr>
<td>APD2214H</td>
<td>Curriculum and Pedagogies for Cross-Curricular Teaching (Prerequisite: APD2210Y.)</td>
</tr>
<tr>
<td>APD2220Y</td>
<td>Teaching Practicum</td>
</tr>
<tr>
<td>APD2221Y</td>
<td>Advanced Teaching Practicum</td>
</tr>
<tr>
<td>APD2222H</td>
<td>Professional Practice Project: Role A</td>
</tr>
<tr>
<td>APD2223H</td>
<td>Professional Practice Project: Role B</td>
</tr>
</tbody>
</table>
### Individual Reading and Research Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD2252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Master's Level</td>
</tr>
</tbody>
</table>

*Course that may continue over a program. The course is graded when completed.*

### APHD: Child Study and Education EdD Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1289H</td>
<td>Multivariate Analysis with Applications (RM)</td>
</tr>
<tr>
<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM)</td>
</tr>
<tr>
<td>APD3301H</td>
<td>Issues in Child Study and Education: Research, Policy, and Problems of Practice (RM)</td>
</tr>
<tr>
<td>APD3302H</td>
<td>Advanced Study of Critical Issues in Special Education, Mental Health, and Child Security (Prerequisite: APD3301H.)</td>
</tr>
<tr>
<td>APD3303H</td>
<td>Advanced Study of Tools and Research Methods for Investigating Problems of Practice: Data-Driven Research for Decision-Making</td>
</tr>
<tr>
<td>APD3304H</td>
<td>Research Proposal Development (RM)</td>
</tr>
<tr>
<td>APD3305H</td>
<td>Systems and Organizational Change</td>
</tr>
<tr>
<td>JOI1288H</td>
<td>Intermediate Statistics and Research Design (RM)</td>
</tr>
<tr>
<td>JOI3228H</td>
<td>Mixed Methods Research Design in Social Sciences (RM)</td>
</tr>
</tbody>
</table>

### LHA1105H Introduction to Qualitative Research: Part I (RM)

### APHD: Counselling and Clinical Psychology

**MA; Field: Clinical and Counselling Psychology**

**Master of Arts**

**Program Description**

The **Counselling and Clinical Psychology program** offers studies leading to the MA and PhD degrees. It is offered by the graduate Department of Applied Psychology and Human Development at the Ontario Institute for Studies in Education (OISE), St. George campus, and the graduate Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC).

This graduate program is intended for students seeking to pursue careers in research, teaching, and clinical practice. At the time of application, students will be required to identify a preference for a specific field as well as for a potential supervisor with whom they would work if admitted to the program.

The program has two fields:

- Clinical and Counselling Psychology, offered primarily by OISE;
- Clinical Psychology, offered primarily by UTSC.

The **field in Clinical and Counselling Psychology** is offered primarily by the OISE Department of Applied Psychology and Human Development. This field is based on a bio-psycho-social model with an emphasis on diversity. It shares an emphasis with the Clinical Psychology field on assessment and the treatment of psychopathology in adults.

This MA program is designed for applicants interested in working as researchers or practitioners in a variety of psychological and educational settings. This program enables students to apply for registration with the College of Psychologists of Ontario (CPO) as a Psychological Associate. It also fulfils the requirements of students who plan to apply to the PhD program, Clinical and Counselling Psychology field.

The MA is taken on a full-time or part-time basis. However, students in the part-time option will be required to complete one year of full-time study to fulfill their degree requirements.

For 2021-22 and further extension to the 2022-23 academic year, admissions to the part-time option have been administratively suspended.
**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the second-, third-, and fourth-year levels).
- A standing equivalent to a University of Toronto A– or better in the final year.

**Program Requirements**

- **Coursework.** Students must complete a total of 4.5 FCEs as follows:
  - APD1203Y* Practicum I: Interventions in Counselling Psychology and Psychotherapy (1.0 FCE) (500 hours of practicum). MA students will attend a minimum of three colloquium presentations during their program, which partially fulfills the course requirements for APD1203Y*.
  - 0.5 elective FCE.
  - APD1208Y* Cognitive and Personality Theory and Assessment (1.0 FCE).
  - APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy (0.5 FCE).
  - APD1228H Couples Counselling (0.5 FCE) or APD1261H Group Work in Counselling and Psychotherapy (0.5 FCE) (or an equivalent course).
  - APD1263H Research Methods for Clinical and Counselling Psychology (RM) (0.5 FCE).
  - JOI1288H Intermediate Statistics and Research Design (RM) (0.5 FCE).
- **Master's thesis.**
- **Full-time option:** Full-time, on-campus study is required from September to April, which represents the Fall and Winter sessions. Normally, 1.5 FCEs are taken in each of the Fall and Winter sessions and a maximum of 1.0 FCE in the Summer session. Under this option, it is expected that all degree requirements will be completed within two years.
- **Part-time option (for 2022-23 and further extension to the 2022-23 academic year, admissions to the part-time option have been administratively suspended):** For this option, students can register as part-time students at the beginning of their program. However, they will be required to register as full-time students for one year of the program. In this option, students will normally take 1.0 FCE annually during the beginning of their program and 1.5 FCEs in each of the Fall and Winter sessions in their year of full-time study. Once they have begun their last required course, they must register continuously and pay the part-time fees until all degree requirements have been completed. Under this option, it is expected that all degree requirements will be completed within two to three years, up to a maximum of six years.

**Program Length**

- 6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
- 10 sessions part-time

**Time Limit**

- 3 years full-time;
- 6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**APHD: Counselling and Clinical Psychology**

**PhD; Field: Clinical and Counselling Psychology**

**Doctor of Philosophy**

**Program Description**

The **Counselling and Clinical Psychology program** offers studies leading to the MA and PhD degrees. It is offered by the graduate Department of Applied Psychology and Human Development at the Ontario Institute for Studies in Education (OISE), St. George campus, and the graduate Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC).

This graduate program is intended for students seeking to pursue careers in research, teaching, and clinical practice. At the time of application, students will be required to identify a preference for a specific field as well as for a potential supervisor with whom they would work if admitted to the program.

The program has two fields:

- Clinical and Counselling Psychology, offered primarily by OISE;
- Clinical Psychology, offered primarily by UTSC.

The **field in Clinical and Counselling Psychology** is offered primarily by the OISE Department of Applied Psychology and Human Development. This field is based on a bio-psycho-social model with an emphasis on diversity. It shares an emphasis with the Clinical Psychology field on assessment and the treatment of psychopathology in adults.

The principal aim of this **PhD program** is the development of research and theoretical knowledge in counselling and clinical psychology, assessment skills, and knowledge and training in professional issues. Students are expected to conduct advanced research and to develop professional knowledge and skills. Graduates will be prepared to assume a variety of positions in psychological teaching, research, and practice in universities,
community settings and agencies offering psychological services, and in university or college counselling centres.

The Counselling and Clinical Psychology program offers both a full-time and flexible-time PhD, and progress in the program will be reviewed annually. The program in Clinical and Counselling Psychology at OISE was accredited by the Canadian Psychological Association (CPA) in 2015-2016 for a six-year term.

For 2021-22 and further extension to the 2022-23 academic year, admissions to the flexible-time PhD option have been administratively suspended.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the second-, third- and fourth-year levels), with a standing equivalent to a University of Toronto A– or better in the final year.
- A University of Toronto MA degree in Clinical and Counselling Psychology with a grade of A– or better, or its equivalent.

Program Requirements

- **Coursework.** Students must complete a minimum of 5.5 FCEs as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD3215H Advanced Psychotherapy Seminar;
    - APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit; 600-hour practicum); and APD3288Y Internship in Clinical and Counselling Psychology (1,600-hour internship — arrangements must be made in consultation with the Director of Clinical Training). PhD students will attend a minimum of six colloquium presentations during their program, which partially fulfills the course requirements for APD3288Y.
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD3225H Assessment and Diagnosis of Personality and Psychopathology; and
    - APD3260H Psychodiagnostic Systems.
  - 0.5 FCE in Supervision and Consultation:
    - APD3261H* Clinical Supervision and Consultation Practicum.
  - 1.0 FCE in Advanced Research Methods:
    - APD3202H A Foundation of Program Evaluation in Social Sciences (RM); and
  - An advanced-level statistics course (in consultation with supervisors). Courses can be drawn from those offered at OISE or other Faculties with the permission of the instructor.
  - 0.5 FCE in History and Systems Psychology:
    - APD3204H Contemporary History and Systems in Human Development and Applied Psychology.
  - **Comprehensive examination:** In addition to normal course requirements, students will complete two comprehensive components. First, a manuscript for publication and presentation at a peer review conference, normally in Year 1 of the program. Second, students will be examined systematically in general psychology and in professional psychology. The examination will normally be taken at the end of Year 2 of full-time study.
  - **Doctoral dissertation:** All students must develop, complete, and defend in a Doctoral Final Oral Examination a doctoral dissertation supervised by a full-time member of the Counselling and Clinical Psychology faculty. The content of such dissertation research may address theoretical issues applicable to clinical and counselling concerns and practice, relate to the development of programs in a variety of educational or applied settings, or in some other way contribute to the development and practice of clinical and counselling psychology.
  - Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
  - Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

5 years

Time Limit

6 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

PhD Program (Flexible-Time)

For 2021-22 and further extension to the 2022-23 academic year, admissions to the flexible-time PhD option have been administratively suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the second-, third- and fourth-year levels), with a standing equivalent to a University of Toronto A– or better in the final year.

For PhD Program (Flexible-Time)
levels), with a standing equivalent to a University of Toronto A– or better in the final year.

- A University of Toronto MA degree in Clinical and Counselling Psychology with a grade of A– or better, or its equivalent.
- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option.
- Applicants must demonstrate that they are currently employed and active professionals engaged in activities relevant to their proposed program of study.

Program Requirements

- **Coursework.** Students must complete a minimum of 5.5 FCEs as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD3215H Advanced Psychotherapy Seminar;
    - APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit; 600-hour practicum); and
    - APD3288Y Internship in Clinical and Counselling Psychology (1,600-hour internship — arrangements must be made in consultation with the Coordinator of Internship and Counselling Services). PhD students will attend a minimum of six colloquium presentations during their program, which partially fulfills the course requirements for APD3288Y.
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD3225H Assessment and Diagnosis of Personality and Psychopathology; and
    - APD3260H Psychodiagnostic Systems.
  - 0.5 FCE in Supervision and Consultation:
    - APD3261H* Clinical Supervision and Consultation Practicum.
  - 0.5 FCE in Advanced Research Methods:
    - APD3202H A Foundation of Program Evaluation in Social Sciences (RM); and
    - An advanced-level statistics course (in consultation with supervisors). Courses can be drawn from those offered at OISE or other Faculties with the permission of the instructor.
  - 0.5 FCE in History and Systems Psychology:
    - APD3204H Contemporary History and Systems in Human Development and Applied Psychology.

- **Comprehensive examination:** In addition to normal course requirements, students will complete two comprehensive components. First, a manuscript for publication and presentation at a peer review conference, normally in Year 1 of the program. Second, students will be examined systematically in general psychology and in professional psychology. The examination will normally be taken at the end of Year 2 of full-time study.

- **Doctoral dissertation:** All students must develop, complete, and defend in a Doctoral Final Oral Examination a doctoral dissertation supervised by a full-time member of the Counselling and Clinical Psychology faculty. The content of such dissertation research may address theoretical issues applicable to clinical and counselling concerns and practice, relate to the development of programs in a variety of educational or applied settings, or in some other way contribute to the development and practice of clinical and counselling psychology.

- Students must register continuously until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department's approval.

- Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

6 years

Time Limit

8 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**APHD: Counselling and Clinical Psychology**

MA and PhD; Field: Clinical and Counselling Psychology Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services' course schedule.

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>APD1202Y</td>
<td>Theories and Techniques of Counselling and Psychotherapy</td>
</tr>
<tr>
<td>APD1203Y</td>
<td>Practicum I: Interventions in Counselling Psychology and Psychotherapy</td>
</tr>
<tr>
<td>APD1208Y</td>
<td>Cognitive and Personality Theory and Assessment</td>
</tr>
<tr>
<td>APD1219H</td>
<td>Ethical Issues in Professional Practice in Psychology and Psychotherapy</td>
</tr>
<tr>
<td>APD1228H</td>
<td>Couples Counselling</td>
</tr>
<tr>
<td>APD1260H</td>
<td>Family Therapy (Exclusion: APD1261H.)</td>
</tr>
<tr>
<td>APD1261H</td>
<td>Group Work in Counselling and Psychotherapy</td>
</tr>
<tr>
<td>APD1263H</td>
<td>Research Methods for Clinical and Counselling Psychology (RM)</td>
</tr>
<tr>
<td>APD1267H</td>
<td>Emotion-Focused Therapy (Co-requisite: APD1202Y. Exclusion: APD5004H.)</td>
</tr>
<tr>
<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM)</td>
</tr>
<tr>
<td>APD3204H</td>
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<td>APD3215H</td>
<td>Advanced Psychotherapy Seminar</td>
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<tr>
<td>APD3217Y</td>
<td>Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit)</td>
</tr>
</tbody>
</table>
**Psychological Clinical Science: Counselling and Clinical Psychology MA; Field: Clinical Psychology**

**Master of Arts**

**Overview**

The field in Clinical Psychology is offered primarily by the Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC). Clinical Psychology at UTSC adheres to a Clinical Science model of training and is accredited by the Canadian Psychological Association (CPA). The primary and overriding objective of graduate training in Clinical Psychology at UTSC is to foster exceptional clinical scientists according to the highest standards of research and professional practice.

Graduate training in Clinical Psychology at UTSC has primary research strengths in the areas of: clinical and cognitive neuroscience, psychological assessment and clinical neuropsychology, psychopathology, personality, and mindfulness- and acceptance-based psychotherapies.

The field in Clinical Psychology adheres to a generalist model of training, with a primary focus on adults. A unifying theme of faculty research in Clinical Psychology at UTSC is to advance knowledge of the etiology and assessment and treatment of mental disorders. Instruction is provided in psychopathology, assessment, and intervention, and students are trained to practise with a variety of adult populations. The field also boasts strength in neuropsychology.

**Contact and Address**

Web: [www.utsc.utoronto.ca/psych/clinical-psychology](http://www.utsc.utoronto.ca/psych/clinical-psychology)
Email: clinical-psych@utsc.utoronto.ca
Telephone: (416) 287-7131

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427G
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

**Program Description**

The full-time, two-year MA program is designed for applicants interested in working as researchers or practitioners in a variety of psychological and academic settings. This program enables students to apply for registration with the College of Psychologists of Ontario (CPO) as a Psychological Associate. It also meets the needs of students who plan to apply to the PhD program in Counselling and Clinical Psychology.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychological Clinical Science’s additional admission requirements stated below.
- A four-year bachelor’s degree from a recognized university with at least an A– (or first-class standing) in the final two years of undergraduate study, and at least 4.0 to 6.0 full-course equivalents (FCEs) in psychology including statistics and some laboratory research experience. Students who are admitted to the program without 4.0 to 6.0 FCEs in required undergraduate coursework may be required to complete additional courses in the master’s program. Applicants with a strong background in mathematics, computer science, statistics, biological science, or neuroscience are encouraged to apply.
- Competitive scores on General and Subject (Psychology) tests of the Graduate Record Examination (GRE). Note: the GRE requirement has been waived for the 2022-23 admissions cycle.
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Department’s Program Faculty Selection Form.
- Applicants whose primary language is not English and who graduated from a university where the language of
Program Requirements

- **Coursework.** The Clinical Psychology field for the MA in Counselling and Clinical Psychology requires **5.0 full-course equivalents (FCEs)** including an ethics course, practicum-based courses, a clinical practicum, and a thesis.
  o 4.5 FCEs as follows:
    - **Year 1:**
      - CPS1601H Psychopathology (0.5 FCE);
      - CPS1701H Psychological Assessment I (0.5 FCE);
      - CPS1702H Psychological Assessment II (0.5 FCE);
      - CPS1801H Psychotherapy (0.5 FCE);
      - CPS1901H Ethics (0.5 FCE).
    - **Year 2:**
      - CPS1101H Clinical Research Design (0.5 FCE);
      - CPS1102H Statistical Techniques I (0.5 FCE);
      - CPS1802H Applied Interventions in Clinical Psychology (0.5 FCE);
      - CPS1803H Practicum in Psychological Interventions (0.5 FCE).
  o 0.5 FCE: Students must complete a clinical practicum at a pre-approved placement site in the final Summer of the program (CPS2999H Summer Practicum)

- **Research thesis** to be completed and orally defended in Year 2 of the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Psychological Clinical Science: Counselling and Clinical Psychology PhD; Field: Clinical Psychology

Doctor of Philosophy

Overview

The **field in Clinical Psychology** is offered primarily by the Graduate Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC). Clinical Psychology adheres to a Clinical Science model of training and is accredited by the Canadian Psychological Association (CPA). The primary and overriding objective of graduate training is to foster exceptional clinical scientists according to the highest standards of research and professional practice. Graduate training in Clinical Psychology at UTSC has primary research strengths in the areas of: clinical and cognitive neuroscience, psychological assessment and clinical neuropsychology, psychopathology, personality, and mindfulness- and acceptance-based psychotherapies.

The field in Clinical Psychology adheres to a generalist model of training, with a primary focus on adults. A unifying theme of faculty research in Clinical Psychology at UTSC is to advance knowledge of the etiology and assessment and treatment of mental disorders. Instruction is provided in psychopathology, assessment, and intervention, and students are trained to practise with a variety of adult populations. The field also boasts strength in neuropsychology.

Contact and Address

Web: [www.utsc.utoronto.ca/psych/clinical-psychology](http://www.utsc.utoronto.ca/psych/clinical-psychology)
Email: clinical-psych@utsc.utoronto.ca
Telephone: (416) 287-7131

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427G
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Program Description

The PhD program is designed for applicants interested in a career as a clinical psychologist based on a Clinical Science model of training. Graduate training in Clinical Psychology at UTSC prepares graduates primarily for research and clinical careers as clinical scientists in university and medical and psychological settings.

The field is distinguished by its innovative cross-disciplinary approach that emphasizes scientific innovation through novel research collaborations that push traditional boundaries in clinical psychology. Importantly, the program meets the needs of students who plan to engage in research, teaching, and/or evidence-based clinical practice. This program is intended to meet the registration requirements of the College of Psychologists of Ontario (CPO) at the doctoral level.

The Counselling and Clinical Psychology program (Clinical Psychology field) is offered on a full-time basis, and progress in the program will be reviewed annually.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- A master's degree in Clinical Psychology (or its equivalent) from a recognized university, with a minimum A– average and excellent research performance.
- Competitive scores on General and Subject (Psychology) tests of the Graduate Record Examinations (GRE). Note:
the GRE requirement has been waived for the 2022-23 admissions cycle.

- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Department's Faculty Selection Form.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must demonstrate proficiency in English. Applicants must complete the Test of English as a Foreign Language (TOEFL), or its equivalent according to SGS regulations, prior to submitting the application. See General Regulations section 4.3 for requirements.

Program Requirements

- The PhD program requires 5.5 full-course equivalents (FCEs) including coursework, three clinical placements, plus a comprehensive examination, thesis proposal, thesis, and thesis defence:
  - 3.5 FCEs in coursework, normally completed by the end of Year 3 (CPS1103H, CPS1201H, CPS1301H, CPS1401H, CPS2901H, CPS2902H, and CPS3901H).
  - 2.0 FCEs in clinical work:
    - 1.0 FCE in two separate part-time clinical placements during Years 1 and 2 (CPS3999H, CPS4999H).
    - 1.0 FCE in a one-year, full-time clinical internship at a Canadian Psychological Association- or American Psychological Association-accredited clinical setting (or equivalent), which normally takes place during Year 5 (CPS5999Y). Eligibility for the clinical internship will be assessed by the Director of Clinical Training (DCT) prior to Year 4 of the program.
- The comprehensive examination requirement consists of two mandatory components:
  - An oral examination focused on clinical expertise (normally completed in the Fall session of Year 2); and
  - A research-focused grant proposal (normally completed in the Fall session of Year 2).
  - A pass on both components is required for a student to continue on to PhD candidacy. Students who fail the oral exam will have the opportunity to retake the exam. Students who fail the grant proposal will have the opportunity to revise and resubmit. Students who fail either or both component(s) on the second attempt should consult the School of Graduate Studies’ Academic Appeals Policy. If after the appeals process and second attempts at either or both component(s) result in a failure, the student will no longer be eligible to continue in the PhD program. Guidelines on the comprehensive requirement can be found in the PCS Graduate Handbook.
- Thesis proposal, normally approved prior to the start of Year 3 of the program.
- Completed thesis.
- Successful defence of the thesis at the Final Oral Examination.
- For students interested in acquiring additional clinical hours, the PhD program provides the following optional courses: CPS6999H and CPS7999H. Please note that optional courses for the PhD must be approved by the faculty supervisor, the DCT, and the Graduate Chair prior to course enrolment.
- Supervisors will have annual meetings with students to assess academic progress and to develop plans of study. The DCT will also hold formal annual meetings with students to assess clinical and professional progress.
- The program length is five years, which includes a pre-doctoral internship.

Program Length

5 years

Time Limit

6 years

Psychological Clinical Science: Counselling and Clinical Psychology MA and PhD; Field: Clinical Psychology Courses

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<tr>
<td>CPS1101H</td>
<td>Clinical Research Design (Exclusion: APD1263H Research Methods for Clinical and Counselling Psychology.)</td>
</tr>
<tr>
<td>CPS1102H</td>
<td>Statistical Techniques I (Exclusion: JOI1287H Introduction to Applied Statistics.)</td>
</tr>
<tr>
<td>CPS1103H</td>
<td>Statistical Techniques II (Exclusion: JOI1288H Intermediate Statistics and Research Design.)</td>
</tr>
<tr>
<td>CPS1201H</td>
<td>Neurobiological Bases of Behaviour</td>
</tr>
<tr>
<td>CPS1209H</td>
<td>Clinical Neuropsychology</td>
</tr>
<tr>
<td>CPS1301H</td>
<td>Cognitive-Affective Bases of Behaviour</td>
</tr>
<tr>
<td>CPS1401H</td>
<td>Social and Interpersonal Bases of Behaviour</td>
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<tr>
<td>CPS1501H</td>
<td>Personality</td>
</tr>
<tr>
<td>CPS1601H</td>
<td>Psychopathology (Exclusion: APD3260H Psychodiagnostic Systems.)</td>
</tr>
<tr>
<td>CPS1701H</td>
<td>Psychological Assessment I (Exclusion: APD3224H Individual Cognitive and Personality Assessment.)</td>
</tr>
<tr>
<td>CPS1702H</td>
<td>Psychological Assessment II</td>
</tr>
<tr>
<td>CPS1801H</td>
<td>Psychotherapy (Exclusion: APD1202Y Theories and Techniques of Counselling and Psychotherapy.)</td>
</tr>
<tr>
<td>CPS1802H</td>
<td>Applied Interventions in Clinical Psychology (Exclusion: APD1203Y* Practicum I: Interventions in Counselling Psychology and Psychotherapy.)</td>
</tr>
<tr>
<td>CPS1803H</td>
<td>Practicum in Psychological Interventions (Exclusion: APD1203Y* Practicum I:</td>
</tr>
</tbody>
</table>
students with the basic preparation for certification as a Certified Canadian Counsellor (CCC) with the Canadian Counselling and Psychotherapy Association (CCPA) and as a Registered Psychotherapist with the College of Registered Psychotherapists of Ontario (CRPO).

The MEd program is typically offered on a full-time basis with a limited number of part-time spots available.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below.
- An appropriate bachelor’s degree of any background or discipline, with a grade equivalent to a University of Toronto B+ or better in the final year, from a recognized university.
- At least one year of relevant counselling-related experience.
- Two letters of reference.

Program Requirements

- **Coursework.** Students must complete 5.0 full-course equivalents (FCEs) as follows:
  - APD1202Y Theories and Techniques of Counselling and Psychotherapy (1.0 FCE).
  - APD1203Y+ Practicum I: Interventions in Counselling Psychology and Psychotherapy (1.0 FCE). The practicum placement is the supervised training component of this course.
  - APD1214H Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy (0.5 FCE; prerequisite: APD1202Y and co-requisite: APD1203Y+).
  - APD1219H Ethical Issues in Professional Practice and Psychotherapy (0.5 FCE).
  - APD1260H Family Therapy (0.5 FCE) or APD1261H Group Work in Counselling and Psychotherapy (0.5 FCE).
- 1.5 FCEs in electives. Recommended electives: one of
  - APD1266H Career Counselling and Development: Transition from School to Work (0.5 FCE).
  - APD1268H Career Counselling and Development: Transitions in Adulthood (0.5 FCE), or
  - APD1267H Emotion-Focused Therapy (0.5 FCE) or APD1278H Cognitive Therapy (0.5 FCE).

- A **comprehensive examination.** Upon completion of program course requirements, students must pass a written comprehensive exam of selected topics from the program curriculum and training.

- Optional additional practicum, counted as one of the electives. Students may choose to complete a practicum (APD1247H Practicum in Adult Counselling and Psychotherapy) for an additional 250 hours of field placement concurrent with the required course (APD1203Y+ Practicum I: Interventions in Counselling Psychology and Psychotherapy). Arrangements for the practicum placement must be made in consultation with and the approval of the Director of Clinical Training.
Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

APHD: Counselling Psychology MEd; Field: Global Mental Health and Counselling Psychology

Master of Education

Program Description

The field in Global Mental Health and Counselling Psychology, within the Counselling Psychology MEd degree program, provides individuals with the opportunity to learn and develop skills appropriate for the field of mental health and counselling psychology in international contexts. Students will be prepared to work in a variety of applied settings, including educational, vocational, and mental health globally. This degree program is ideally suited to students interested in an international perspective of mental health and counselling. This field will not lead to registration as a Certified Canadian Counsellor with the Canadian Counselling and Psychotherapy Association (CCPA), nor will it provide registration with the College of Registered Psychotherapists of Ontario (CRPO). This degree is cohort based and is offered full-time only.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below.
- An appropriate bachelor's degree, with a grade equivalent to a University of Toronto B+ or better in the final year, from a recognized university.
- At least one year of relevant counselling-related experience.
- Two letters of reference.
- Normally, an interview is required prior to admission.

Program Requirements

- Coursework. Students must complete 5.0 full-course equivalents (FCEs) as follows:
  - APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy (0.5 FCE).
  - APD1228H Couples Counselling (0.5 FCE).
  - APD1245H Brief Strategies in Counselling and Psychotherapy (0.5 FCE).
  - APD1268H Career Counselling and Development: Transitions in Adulthood (0.5 FCE).
  - APD1278H Cognitive Therapy (0.5 FCE).
  - APD1282H Introduction to Global Mental Health and Counselling Psychology (0.5 FCE).
  - APD1283H Peer and Video-Based Counselling With Practicum Field-Based Learning in Global Mental Health (0.5 FCE).
  - APD1902H Theories and Techniques of Counselling in a Global Context (0.5 FCE).
  - APD2293H Interpretation of Educational Research (0.5 FCE).
  - APD5000H Special Topics in Applied Psychology and Human Development: Master's Level (0.5 FCE).

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

APHD: Counselling Psychology MEd; Field: Global Mental Health and Counselling Psychology (Dual Degree)

Dual Degree Program: Master of Education (University of Toronto) / Master of Medicine (China Medical University)

Program Description

This dual degree program creates a pathway between U of T’s Master of Education (MED) in Counselling Psychology, Global Mental Health and Counselling Psychology (GMHCP) field and China Medical University (CMU)’s Master of Medicine (MMed) in Psychiatry and Mental Health programs.

In Year 1, students complete MMed coursework at CMU, Liaoning Province, China. In Year 2, students complete MED coursework at U of T in Toronto, Canada. In the Fall session of Year 3, students complete the last course of the MED requirement, a practicum, in China along with the Year 3 MMed coursework. In Year 3, students will also complete a master’s thesis at CMU as part of the dual degree requirements.

Students will gain both degrees in three years rather than the four years it would take to acquire the degrees independently.
Application Process

- Applicants must apply directly to both the Department of Applied Psychology and Human Development at U of T and the Department of Medical Psychology and Mental Health at CMU. Applicants must apply through U of T’s School of Graduate Studies online admissions application system.

Minimum Admission Requirements

- In order to be admitted to the dual degree program, applicants must meet the admission requirements of both programs. The admission requirements of the GMHCP field within the MEd program are stated below.
- Applicants are admitted under the General Regulations of the School of Graduate Studies at the University of Toronto as well as the specific requirements of the MEd program.
- An appropriate bachelor's degree from a recognized university with a standing in the final year equivalent to at least a U of T B+.
- At least one year of relevant experience, which could be paid or volunteer.
- Two letters of reference.
- Normally, an interview is required prior to admission to the MEd program.

Program Requirements

During their U of T registration in the GMHCP field within the MEd program, students must successfully complete a total of 5.0 full-course equivalents (FCEs).

Year 1

- **Fall, Winter, and Summer sessions**: students complete Year 1 MMed courses at CMU.

Year 2

- Students complete the following Year 2 MEd courses at U of T.
- **Fall session (1.5 FCEs)**:
  - APD1268H Career Counselling and Development: Transitions in Adulthood.
  - APD1282H Introduction to Global Mental Health and Counselling Psychology.
  - APD1902H Theories and Techniques of Counselling in a Global Context.

  - **Winter session (1.5 FCEs)**:
    - APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy.
    - APD1278H Cognitive Therapy.
    - APD2293H Interpretation of Educational Research.

  - **May-to-June period of the Summer session (1.0 FCE)**:
    - APD1228H Couples Counselling.
    - APD1245H Brief Strategies in Counselling and Psychotherapy.

  - **July-to-August period of the Summer session (0.5 FCE)**:
    - APD5000H Special Topics in Applied Psychology and Human Development: Master's Level.

Year 3

- **Fall session (0.5 FCE)**:
  - Complete the U of T MEd course APD1283H* Peer and Video-Based Counselling With Practicum Field-Based Learning in Global Mental Health. This is a 250-hour placement in an approved field setting and must be arranged prior to admission to this program.
  - Continue the MMed program requirements at CMU.

- **Winter and Summer sessions**:
  - Complete the MMed program requirements at CMU.

Program Length

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)
Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below.
- An appropriate bachelor's degree, with a grade equivalent to a University of Toronto B+ or better in the final year, from a recognized university.
- Teacher certification.

Program Requirements

- **Coursework.** Students must complete 5.0 full-course equivalents (FCEs) as follows:
  - APD1202Y Theories and Techniques of Counselling and Psychotherapy (1.0 FCE).
  - APD1203Y* Practicum I: Interventions in Counselling Psychology and Psychotherapy (1.0 FCE). The practicum placement is the supervised training component of this course.
  - APD1214H Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy (0.5 FCE; prerequisite: APD1202Y and co-requisite: APD1203Y*).
  - APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy (0.5 FCE).
  - APD1260H Family Therapy (0.5 FCE) or APD1261H Group Work in Counselling and Psychotherapy (0.5 FCE).
  - APD1262H Educational Psychological Testing for Counselling (0.5 FCE).
  - APD1266H Career Counselling and Development: Transition from School to Work (0.5 FCE).
  - 0.5 FCE in electives.
- **A comprehensive examination.** Upon completion of program course requirements, students will take a comprehensive examination of selected topics from the program curriculum and training.
- **Optional additional practicum.** Students may choose to complete a practicum (APD1247H Practicum in Adult Counselling and Psychotherapy) for an additional 250 hours of field placement concurrent with the required course APD1203Y* Practicum I: Interventions in Counselling Psychology and Psychotherapy. Arrangements for the practicum placement must be made in consultation with and the approval of the Director of Clinical Training.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

APHD: Counselling Psychology EdD; Field: Counselling and Psychotherapy

Doctor of Education

Program Description

Counsellor training in this degree program emphasizes the role of the counsellor in educational and community settings with expertise in supervisory and consultative skills and advanced counselling theory and practice. Graduates will be prepared to take leadership positions in the field of counselling and psychotherapy as educators in colleges and institutes of education; as directors and coordinators of school guidance programs; as specialists in the provision of counselling-related, in-service training for school and college personnel; and as providers of advanced levels of personal counselling in community and educational settings.

The **field in Counselling and Psychotherapy** will be especially attractive to individuals who have demonstrated a career commitment to the provision of counselling-related services in an educational and community setting. This professional doctorate is designed to prepare students to refine and build on professional knowledge and practice to support the development of scholar-practitioners to be leaders in their fields of professional practice.

The Doctor of Education (EdD) program is only available on a full-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below.
- Applicants must have the following to be admitted to the EdD program:
  - A **bachelor's degree**: an appropriate bachelor's degree of any background or discipline from a recognized university, with high academic standing.
  - A **master's degree**: an MA or MEd degree in Counselling Psychology or School and/or Clinical Child Psychology from the University of Toronto with a grade of B+ or better, or its equivalent from a recognized university. The applicant must have had successful professional experience and interest to increase and advance their knowledge of counselling and psychotherapy to become leaders in their fields. Applicants who hold an MEd or other non-thesis master's degree must submit evidence of their ability to identify a research question or problem, to design and conduct a research study or project, and to report the findings or results, all in a rigorous manner. This constitutes a Qualifying Research Paper (QRP).
Program Requirements

• Coursework. Students must take courses related to the development of advanced competence in counselling, psychotherapy, and mental health theory and practice and become sophisticated consumers of research in these and related fields. Students must complete a minimum of 5.5 full-course equivalents (FCEs) including a practicum, internship, and thesis (dissertation in practice) as follows:
  o APD3115H* Research Proseminar in Counselling and Psychotherapy (0.5 FCE).
  o APD3215H Advanced Psychotherapy Seminar (0.5 FCE).
  o APD3261H* Clinical Supervision and Consultation Practicum (0.5 FCE).
  o APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (1.0 FCE; Credit/No Credit): complete a 500-hour practicum before the Final Oral Examination.
  o APD3270H EdD Internship (0.5 FCE): complete 500 hours of internship, typically after the Final Oral Examination. All internship arrangements must be made in consultation with the Director of Clinical Training.
  o Three courses, one from each of the following three groupings:
    ▪ APD3178H Advanced Cognitive Behaviour Therapy (0.5 FCE) or APD3160H Advanced Family Therapy (0.5 FCE)
    ▪ APD3260H Psychodiagnostic Systems (0.5 FCE) or one elective in a special focus of interest (0.5 FCE)
    ▪ APD3202H A Foundation of Program Evaluation in Social Sciences (RM) (0.5 FCE) or JOI3228H Mixed Methods Research Design in Social Sciences (RM) (0.5 FCE) or an equivalent course (with approval of the Program Chair).
  o In addition, students must take 1.0 FCE in their specific area of focus.
    ▪ Option 1: Counselling and Psychotherapy for Adults
      ▪ APD3163H Advanced Multicultural Counselling and Psychotherapy (0.5 FCE)
      ▪ One elective in a special focus of interest (0.5 FCE)
    ▪ Option 2: Counselling and Psychotherapy for Schools and Youth
      ▪ APDS284Y Assessment and Intervention with Culturally and Linguistically Diverse Children, Youth, and Families (1.0 FCE).
  • Optional additional practicum. Students may choose to take an optional continuous practicum (APD3271H6) Additional PhD Practicum in conjunction with the required doctoral practicum course APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit).
  • Thesis (dissertation in practice). All students must complete a thesis (dissertation in practice), the aim of which is to ensure excellent knowledge of counselling and psychotherapy theory, practice, and policy for professionals working with adults or children/youth to function as leading scholar-practitioners. The thesis (dissertation in practice) should be: a) well conceived, original, and likely to make a sustained contribution to mental health practice; b) involve creativity, innovative methods and techniques, and have the potential to improve practice; c) exemplary, sets high standards in the field, and can be emulated and; d) has the potential for significant public impact. The focus of the thesis (dissertation in practice) is expected to be on contributions to field development or to innovations in practice. Students will defend their thesis (dissertation in practice) at a Final Oral Examination.
  • Students are full-time and must maintain continuous, full-time registration and pay full-time fees until all degree requirements, including the thesis (dissertation in practice), are completed.
  • Students cannot transfer between the EdD and PhD programs.

Program Length

4 years full-time

Time Limit

6 years full-time

6 Course that may continue over a program. The course is graded when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

APHD: Counselling Psychology EdD; Field: School Psychology

Doctor of Education

Program Description

Counsellor training in this degree program emphasizes the role of the counsellor in educational and community settings with the goal of enhancing their expertise in their professional roles including supervisory and consultative skills and the advanced study of counselling theory and practice. Graduates will be prepared to take leadership positions in the field of counselling and psychotherapy; as educators in colleges and institutes of education; as directors and coordinators of school guidance programs; as specialists in the provision of counselling-related, in-service training for school and college personnel; and as providers of advanced levels of personal counselling in community and educational settings.

The field in School Psychology will be especially attractive to practitioners providing direct services to children and youth in the education system (K-12) and will provide school psychology practitioners with core theoretical and practical training needed to develop research-informed leaders in the field of school psychology. The program is structured to provide students with the requirements necessary for registration as a School Psychologist with the College of Psychologists of Ontario.

The Doctor of Education (EdD) program is only available on a full-time basis.
Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Department of Applied Psychology and Human Development stated below.
- Applicants must have the following to be admitted to the EdD program:
  - A bachelor's degree: an appropriate bachelor's degree of any background or discipline from a recognized university, with high academic standing.
  - A master's degree: an MA or MEd degree in Counselling Psychology or School and/or Clinical Child Psychology from the University of Toronto with a grade of B+ or better, or its equivalent from a recognized university. The applicant must have had successful professional experience and interest to increase and advance their knowledge of counselling and psychotherapy to become leaders in their fields. Applicants who hold an MEd or other non-thesis master's degree must submit evidence of their ability to identify a research question or problem, to design and conduct a research study or project, and to report the findings or results, all in a rigorous manner. This constitutes a Qualifying Research Paper (QRP).
  - Applicants must demonstrate either undergraduate- or graduate-level competence in each of the five core content areas of psychology: 1) Biological Bases of Behaviour; 2) Cognitive/Affective Bases of Behaviour; 3) Historical and Scientific Foundations of Psychology; 4) Scientific and Professional Ethics (graduate level); and 5) Social Bases of Behaviour, by successful completion of
    - 1.0 full-course equivalent (FCE) at the second-, third-, or fourth-year undergraduate level or
    - 0.5 FCE at the graduate level.
  - If the above requirements are not met, students must take additional courses to ensure they have completed the above requirements by the end of their program.

Program Requirements

- Coursework. Students must take courses related to the development of advanced competence in counselling, psychotherapy, and mental health theory and practice and become sophisticated consumers of research in these and related fields. Students must complete a minimum of 5.5 full-course equivalents (FCEs) including a practicum, internship, and thesis (dissertation in practice) as follows:
  - APD3115H* Research Proseminar in Counselling and Psychotherapy (0.5 FCE).
  - APD3215H Advanced Psychotherapy Seminar (0.5 FCE).
  - APD3261H* Clinical Supervision and Consultation Practicum (0.5 FCE).
  - APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (1.0 FCE; Credit/No Credit): complete a 500-hour practicum before the Final Oral Examination.
  - APD3401H Assessment With Culturally and Linguistically Diverse Children, Youth, and Families (0.5 FCE)
  - APD3402H Intervention With Culturally and Linguistically Diverse Children, Youth, and Families (0.5 FCE)
  - APD3403H EdD Internship in School Psychology (0.5 FCE): complete 1,600 hours of internship, typically after the Final Oral Examination. All internship arrangements must be made in consultation with the Director of Clinical Training.
  - Three courses, one from each of the following three groupings:
    - APD3178H Advanced Cognitive Behaviour Therapy (0.5 FCE) or APD3160H Advanced Family Therapy (0.5 FCE)
    - APD3260H Psychodiagnostic Systems (0.5 FCE) or one elective in a special focus of interest (0.5 FCE)
    - An advanced-level statistics or research methods course (in consultation with the student’s supervisor). Courses can be drawn from those offered at OISE or other Faculties with the permission of the instructor (0.5 FCE).
- Optional additional practicum. Students may choose to take an optional continuous practicum (APD3271H* Additional PhD Practicum) in conjunction with the required doctoral practicum course APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit).
- Thesis (dissertation in practice). All students must complete a thesis (dissertation in practice), the aim of which is to ensure excellent knowledge of counselling or school psychology theory, practice, and policy for professionals working with adults or children/youth to function as leading scholar-practitioners. The thesis (dissertation in practice) should be: a) well conceived, original, and likely to make a sustained contribution to mental health or school psychology practice; b) involve creativity, innovative methods and techniques, and have the potential to improve practice; c) exemplary, sets high standards in the field, and can be emulated and; d) has the potential for significant public impact. The focus of the thesis (dissertation in practice) is expected to be on contributions to field development or to innovations in practice. Students will defend their thesis (dissertation in practice) at a Final Oral Examination.
- Students are full-time and must maintain continuous, full-time registration and pay full-time fees until all degree requirements, including the thesis (dissertation in practice), are completed.
- Students cannot transfer between the EdD and PhD programs.

Program Length

4 years full-time

Time Limit

6 years full-time

* Course that may continue over a program. The course is graded when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
APHD: Counselling Psychology MEd and EdD; Fields: Counselling and Psychotherapy; Global Mental Health and Counselling Psychology; Guidance and Counselling; School Psychology

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services' course schedule.

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<th>Course Code</th>
<th>Course Title</th>
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<td>APD1204H</td>
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<td>APD1267H</td>
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<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM) (Prerequisites: MEd students must have completed APD1212H or APD2293H or JOI1287H.)</td>
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<tr>
<td>APD3260H</td>
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<td>APD3261H*</td>
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<td>Intervention with Culturally and Linguistically Diverse Children, Youth, and Families</td>
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</table>
APD3403H | EdD Internship in School Psychology
APD5000H | Special Topics in Applied Psychology and Human Development: Master’s Level
APD6000H | Special Topics in Applied Psychology and Human Development: Doctoral Level
JOI3228H | Mixed Methods Research Design in Social Sciences (RM)
JOI3229H | Meta-Analysis for Research in Psychology and Education (RM)
JOI6000H | Advanced Quantitative Research Methods Courses

Individual Reading and Research Courses

APD2252H | Individual Reading and Research in Human Development and Applied Psychology: Master’s Level
APD2252H | Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

◊ Course that may continue over a program. The course is graded when completed.
* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

APHD: Developmental Psychology and Education MA

Master of Arts

Program Description

The Developmental Psychology and Education program offers studies leading to the MA, MEd, and PhD degrees. Students have an opportunity to construct an overall perspective on developmental psychology and human development and their implications for practice with children in educational and other applied settings.

Students take foundation courses in human development and research methodology in consultation with their advisor. Elective courses cover a range of areas including cognitive, social, and emotional development; cognition and instruction (language, literacy, and mathematics); special education and adaptive instruction; developmental neuroscience; advanced research methodology and evaluation; and early childhood policy and programs, including child care. The MA program is designed for students wishing to pursue an academic or research-based career.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree with the equivalent of a University of Toronto A– or better. Although most applicants will have a degree in psychology, applicants with an appropriate bachelor's degree in cognitive science, computer science, linguistics, or a helping profession such as occupational therapy, speech-language pathology, physiotherapy, nursing, social work, or another discipline relevant to their specific program of study are also eligible to apply for admission.

Program Requirements

- **Coursework.** Students must complete 2.0 full-course equivalents (FCEs) as follows:
  - APD1209H Research Methods and Thesis Preparation in Human Development and Applied Psychology (0.5 FCE)
  - JOI1288H Intermediate Statistics and Research Design (RM) (0.5 FCE)
  - Two elective courses (1.0 FCE total) chosen in consultation with the student's advisor, which may include APD2252H Individual Reading and Research (0.5 FCE).
  - Students who have not taken a previous course in human development are required to take APD1201H Child and Adolescent Development (0.5 FCE) or an equivalent.
  - In addition to their required 2.0 FCEs, students who have not taken a previous course in statistics are required to take JOI1287H Introduction to Applied Statistics or an equivalent course.
- **Master's thesis.**

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

APHD: Developmental Psychology and Education MEd

Master of Education

Program Description

The Developmental Psychology and Education program offers studies leading to the MA, MEd, and PhD degrees. Students have an opportunity to construct an overall perspective on

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APHD: Developmental Psychology and Education MEd; Emphasis: Program Evaluation

Program Description

Within the MEd program in Developmental Psychology and Education, the emphasis in Program Evaluation is designed to engage students in an exploration of program evaluation used in education, psychology, and social sciences. Program evaluation is a systematic analysis of the process, effectiveness, and outcomes of programs. The primary purpose of program evaluation is to assess what components of a program is working or not and why. Students will learn to understand the concepts and theories needed to be a critical reviewer of evaluation designs and develop core components of program evaluation proposals and reports. As such, students will develop the basic competencies needed for program evaluation, including critically appraising evaluation research; assessing program needs; developing a logic model; evaluating process and outcomes of the program; evaluating efficiency; dealing with ethical issues; warranting evaluation claims; and communicating with stakeholders. Furthermore, students will develop an understanding of how social, cultural, and political factors impact program evaluation.

Program Requirements

Coursework. Students must successfully complete a total of 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program, as follows: 1.0 FCE from the Program Evaluation menu and 0.5 FCE from the Research Methods menu, listed below.

- Program Evaluation menu (1.0 FCE from the following):
  - APD1212H Basics to Program Evaluation in Social Sciences
  - APD1226H Foundations in Inquiry and Data-Based Decision Making
  - APD1241H Outcomes of Early Education and Child Care
  - APD3202H A Foundation of Program Evaluation in Social Sciences (RM)
  - APD3301H Issues in Child Study and Education: Research, Policy, and Problems of Practice (RM)
  - APD3305H Systems and Organizational Change.

- Research Methods menu (0.5 FCE from the following):
  - APD1210H Research Practicum
  - APD1289H Multivariate Analysis with Applications (RM)
  - APD1292H Instrument Design and Analysis (RM)
  - APD3201H Qualitative Research Methods in Human Development and Applied Psychology (RM)
  - JOI1287H Introduction to Applied Statistics (RM)
  - JOI1288H Intermediate Statistics and Research Design (RM)
  - JOI3043H Development and Use of Surveys in Education Research (RM)
  - JOI3048H Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)
  - JOI3228H Mixed Methods Research Design in Social Sciences (RM).
Upon successful completion of the emphasis requirements and successful completion of the degree requirements, students may make a request to the Developmental Psychology and Education Program Liaison to have the emphasis noted on the student transcript. This request must be made before graduation.

APHD: Developmental Psychology and Education PhD

Doctor of Philosophy

Program Description

The Developmental Psychology and Education program offers studies leading to the MA, MEd, and PhD degrees. Students have an opportunity to construct an overall perspective on developmental psychology and human development and their implications for practice with children in educational and other applied settings.

Students take courses in human development and research methodology. Elective courses, chosen in consultation with their advisor, cover a range of areas including cognitive, social, and emotional development; cognition and instruction (language, literacy, and mathematics); special education and adaptive instruction; developmental neuroscience; advanced research methodology and evaluation; and early childhood policy and programs, including child care. The PhD program is designed for students wishing to pursue an academic or research-based career.

The Developmental Psychology and Education program offers both a full-time and a flexible-time PhD program option. Applicants must declare the option for which they are interested in applying. The flexible-time PhD degree program is designed to accommodate demand by practising professionals for a PhD degree that permits continued employment in areas related to their fields of research. Degree requirements for the full-time and flexible-time options are the same.

PhD students have the option of completing an emphasis in Early Learning. Please see details below.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- Normally, an appropriate bachelor's degree and a master's degree in developmental psychology and education, cognitive psychology, applied developmental psychology, or child study, with standing equivalent to a University of Toronto A+– or better in the master's degree. Applicants with master's degrees in other disciplines such as adult education, anthropology, computer science, curriculum, philosophy, or a profession such as speech-language pathology, nursing, social work, physiotherapy, or occupational therapy may be eligible to apply for admission, but may have to complete additional courses to fulfill master's-level requirements equivalent to the MA in Developmental Psychology and Education. Students who have not completed a master's thesis will be required to submit a Qualifying Research Paper (QRP) prior to final admission to the program.
- Required letters of recommendation and a second academic letter of recommendation.

Program Requirements

- **Coursework.** Students must complete 2.0 full-course equivalents (FCEs) as follows:
  - APD3200H Research Proseminar in Human Development and Applied Psychology (0.5 FCE).
  - 0.5 FCE in statistics and research methods from an approved menu.
  - 1.0 FCE in electives (2 X 0.5 FCE).
  - The 2.0 FCEs are normally completed in Year 1 and should be chosen in consultation with the faculty advisor. Students who have an insufficient background in developmental psychology may have to complete additional courses.

- **A comprehensive examination.**
  - The purposes of the comprehensive examination are threefold:
    - To demonstrate the student's ability to work independently within an area of concern in human development.
    - To gain knowledge of a new area, a new technique or method in a specified area in human development.
    - To demonstrate the ability to integrate information at the accepted standard for a PhD student.
  - Students have two options when fulfilling their PhD comprehensive requirements:
    - Option 1: Empirical Research Paper or
    - Option 2: Internship.

- **A thesis and Doctoral Final Oral Examination.**
  - Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
  - Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

4 years

Time Limit

6 years
PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- Normally, an appropriate bachelor's degree and a master's degree in developmental psychology and education, cognitive psychology, applied developmental psychology, or child study, with standing equivalent to a University of Toronto A- or better in the master's degree. Applicants with master's degrees in other disciplines such as adult education, anthropology, computer science, curriculum, philosophy, or a profession such as speech-language pathology, nursing, social work, physiotherapy, or occupational therapy may be eligible to apply for admission, but may have to complete additional courses to fulfill master's-level requirements equivalent to the MA in Developmental Psychology and Education. Students who have not completed a master's thesis will be required to submit a Qualifying Research Paper (QRP) prior to final admission to the program.
- Required letters of recommendation and a second academic letter of recommendation.
- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option.
- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities relevant to their proposed program of study.

Program Requirements

- **Coursework.** Students must complete 2.0 full-course equivalents (FCEs) as follows:
  - APD3200H Research Proseminar in Human Development and Applied Psychology (0.5 FCE).
  - 0.5 FCE in statistics and research methods from an approved menu.
  - 1.0 FCE in electives (2 X 0.5 FCE).
  - The 2.0 FCEs are normally completed in Year 1 and should be chosen in consultation with the faculty advisor. Students who have an insufficient background in developmental psychology may have to complete additional courses.
- **A comprehensive examination.**
  - The purposes of the comprehensive examination are threefold:
    - To demonstrate the student's ability to work independently within an area of concern in human development.
    - To gain knowledge of a new area, a new technique or method in a specified area in human development.
    - To demonstrate the ability to integrate information at the accepted standard for a PhD student.
  - Students have two options when fulfilling their PhD comprehensive requirements:
    - Option 1: Empirical Research Paper or
    - Option 2: Internship.
- **A thesis and Doctoral Final Oral Examination.**

Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department's approval.

Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

6 years

Time Limit

8 years

APHD: Developmental Psychology and Education PhD Emphasis: Early Learning

Emphasis: Early Learning

Admissions to this emphasis have been administratively suspended.

Students interested in the Early Learning emphasis should consult with the Graduate Coordinator.

- Students wishing to complete the emphasis in Early Learning will include the following courses (2.0 full-course equivalents [FCEs]) in their overall PhD program:
  - APD3200H Research Proseminar in Human Development and Applied Psychology (0.5 FCE).
  - APD3273H Researching Early Learning (0.5 FCE): an overview course of quantitative and qualitative methodology which meets the requirements of an intermediate or higher-level statistics course required of all Developmental Psychology and Education students.
  - APD1211H Psychological Foundations of Early Development and Education (0.5 FCE).
  - APD3274H Early Learning and Thesis Development (0.5 FCE).

APHD: Developmental Psychology and Education MA, MEd, and PhD Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services' course schedule.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1200H</td>
<td>Foundations of Human Development and Education</td>
</tr>
<tr>
<td>APD1201H</td>
<td>Child and Adolescent Development (Prerequisite: at least one of APD1233H or APD1249H, or permission of the instructor.)</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>APD1206H</td>
<td>Mind, Brain, and Instruction (Prerequisite: at least one of APD1233H or APD1249H, or permission of the instructor. Exclusion: APD5012H.)</td>
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<td>APD1209H</td>
<td>Research Methods and Thesis Preparation in Human Development and Applied Psychology</td>
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<tr>
<td>APD1210H</td>
<td>Research Practicum (RM)</td>
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<tr>
<td>APD1211H</td>
<td>Psychological Foundations of Early Development and Education</td>
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<td>APD1212H</td>
<td>Basics to Program Evaluation in Social Sciences (Exclusion: APD5021H.)</td>
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<tr>
<td>APD1213H</td>
<td>Psychology and Education of Students with ADHD (Prerequisite: at least one of APD1281H, APD1297H, or permission of the instructor. Exclusion: APD5001H.)</td>
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<td>APD1217H</td>
<td>Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children</td>
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<td>APD1231H</td>
<td>Mindful Self-Compassion for Educators (Exclusion: APD5018H.)</td>
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<tr>
<td>APD1233H</td>
<td>Cognitive Development and Applications</td>
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<tr>
<td>APD1235H</td>
<td>Technology, Play, and Social Media in Adolescence (Prerequisite: at least one of APD1233H, APD1249H, APD1281H, or permission of the instructor. Exclusion: APD5017H.)</td>
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<tr>
<td>APD1236H</td>
<td>Developmental Psychopathology (Prerequisite: at least one of APD1233H, APD1249H, or permission of the instructor.)</td>
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<tr>
<td>APD1241H</td>
<td>Outcomes of Early Education and Child Care</td>
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<td>APD1256H</td>
<td>Child Abuse: Intervention and Prevention</td>
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<td>APD1271H</td>
<td>Perspectives on Executive Functions in Education: From Theory to Practice</td>
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<td>APD1272H</td>
<td>Play and Education</td>
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<td>APD1280H</td>
<td>Symbolic Development and Learning</td>
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<td>APD1281H</td>
<td>Education Exceptionalities, Special Education, and Adaptive Instruction</td>
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<tr>
<td>APD1286H</td>
<td>Foundations of Literacy Development for School Age Children</td>
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<tr>
<td>APD1289H</td>
<td>Multivariate Analysis with Applications (RM)</td>
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<td>APD1290H</td>
<td>Indigenous Healing in Counselling and Psychoeducation</td>
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<tr>
<td>APD1292H</td>
<td>Instrument Design and Analysis (RM)</td>
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<td>APD1294H</td>
<td>Technology, Psychology, and Play</td>
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<td>APD1295H</td>
<td>Adolescent Mental Health: An Examination of Risk and Resilience (Prerequisites: APD1249H and APD1297H.)</td>
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<tr>
<td>APD1296H</td>
<td>Assessing School-Aged Language Learners</td>
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<td>APD1297H</td>
<td>Mental Health in the Classroom: How Educators Can Help Our Most Vulnerable Students</td>
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<td>APD1298H</td>
<td>Imagination, Reasoning, and Learning</td>
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<td>APD1299H</td>
<td>Language Acquisition and Development in Early Childhood</td>
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<td>APD2275H</td>
<td>Technology for Adaptive Instruction and Special Education</td>
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<td>APD2293H</td>
<td>Interpretation of Educational Research</td>
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<td>APD2296H</td>
<td>Reading and Writing Difficulties</td>
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<td>APD3200H</td>
<td>Research Pro-seminar in Human Development and Applied Psychology</td>
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<tr>
<td>APD3201H</td>
<td>Qualitative Research Methods in Human Development and Applied Psychology (RM)</td>
</tr>
<tr>
<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM) (Prerequisite: MEd students must have completed APD1212H or APD2293H or JOI1287H.)</td>
</tr>
<tr>
<td>APD3273H</td>
<td>Researching Early Learning: An Overview Course of Quantitative and Qualitative Methodology</td>
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<tr>
<td>APD3274H</td>
<td>Early Learning and the Thesis</td>
</tr>
<tr>
<td>APD3305H</td>
<td>Systems and Organizational Change (Exclusion: APD6006H.)</td>
</tr>
<tr>
<td>APD5000H</td>
<td>Special Topics in Applied Psychology and Human Development: Master's Level</td>
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<td>APD6000H</td>
<td>Special Topics in Applied Psychology and Human Development: Doctoral Level</td>
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<tr>
<td>JDS1249H</td>
<td>Social-Emotional Development and Applications</td>
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<tr>
<td>JDS3000H</td>
<td>Advanced Methods in Developmental Science</td>
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<tr>
<td>JOI1287H</td>
<td>Introduction to Applied Statistics (RM)</td>
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<tr>
<td>JOI1288H</td>
<td>Intermediate Statistics and Research Design (RM)</td>
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**Individual Reading and Research Courses**

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<tr>
<td>APD2252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Master's Level</td>
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<tr>
<td>APD3252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level</td>
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</table>
APHD: School and Clinical Child Psychology MA

Master of Arts

Program Description

The mission of the School and Clinical Child Psychology (SCCP) program is to provide students with theoretical, research, and professional training in preparation for leadership in psychological practice with children, adolescents, and families in school, mental health, private practice, and research settings. The program follows a scientist-practitioner model and is designed to train students to conduct basic and applied research and provide professional training in psychological assessment, therapy, and other psychosocial and instructional interventions, professional consultation, and prevention.

Opportunities are available for research and professional work with infants, young children, adolescents, adults, and families. The degrees are intended to meet the academic requirements of the College of Psychologists of Ontario (CPO) for registration as a Psychological Associate (MA) or Psychologist (PhD).

The curriculum of the SCCP program is designed to establish a strong foundation of core knowledge and skills early in the program, with students free to specialize later on. The program reflects a mix of courses and training opportunities.

A systemic approach is the basis for the training that is provided in assessment and intervention. The knowledge and skills necessary for the practice of school psychology and clinical child psychology overlap considerably, and experience in school and clinical settings complement and enhance each other. Therefore, over the course of the program of study, students are required to undertake practica in both school and clinical child settings.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology, defined as 6.0 full-course equivalents (FCEs) in psychology, including 0.5 FCE in child development and 1.0 FCE in research methods/statistics (of which at least 0.5 FCE must be at the third or fourth-year levels) and at least 3.0 FCEs at the second, third-, or fourth-year levels. The usual admission standard is equivalency to a University of Toronto A– or better.
- Most applicants will have evidence of relevant professional experience and research experience.
- Applicants are requested to submit, in addition to two academic references, a letter of recommendation from an applied setting.

Program Requirements

- **Coursework.** Students must complete 5.0 FCEs (including a practicum course) and a thesis.
- APD1205H Ethical Issues in Applied Psychology (0.5 FCE).
- APD1215H Psychological Assessment of School-Aged Children (0.5 FCE).
- APD1216H Psychoeducational Assessment (0.5 FCE).
- APD1218H Seminar and Practicum in School-Based Assessment, Consultation, and Intervention (0.5 FCE). The practicum portion consists of 250 hours (one day a week from September to June) and is normally taken in a school setting.
- APD1222H Approaches to Psychotherapy-Lifespan (0.5 FCE).
- APD1236H Developmental Psychopathology (0.5 FCE).
- APD1285H Psychology and Education of Children with Learning Disabilities (0.5 FCE).
- JO1288H Intermediate Statistics and Research Design (RM) (0.5 FCE).
- APD3240H Advanced Social and Emotional Assessment Techniques (0.5 FCE).
- 0.5 FCE in Cognitive/Affective bases of behaviour from an approved course listing. Note: Students who have a 1.0 FCE in Cognitive/Affective bases of behaviour at the senior undergraduate level approved by the program may substitute an elective course for this requirement or a course in the Biological Bases of Behaviour or Social Bases of Behaviour menus, or APD3204H, Contemporary History and Systems in Human Development and Applied Psychology.

**Thesis.**

A listing of approved Cognitive/Affective, Social, and Biological bases of behaviour courses is available on the departmental website and in the Applied Psychology and Human Development program guidelines.

In addition to the above course requirements, students who have not taken a previous child development course in their undergraduate degree program will be required to take APD1201H Childhood and Adolescent Development.

Students who have not taken a previous statistics course or its equivalent must take JO1287H Introduction to Applied Statistics (RM).

Students must achieve a minimum of A– in at least one of APD1215H Psychological Assessment of School-Aged Children and APD1216H Psychoeducational Assessment, and must complete APD1218H Seminar and Practicum in School-Based Assessment, Consultation, and Intervention in order to remain in good standing and be permitted to continue in the program.

Failure to meet these criteria will normally result in a recommendation to the School of Graduate Studies to terminate the student's registration in the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
APHD: School and Clinical Child Psychology PhD

Doctor of Philosophy

Program Description

The mission of the School and Clinical Child Psychology (SCCP) program is to provide students with theoretical, research, and professional training in preparation for leadership in psychological practice with children, adolescents, and families in school, mental health, private practice, and research settings. The program follows a scientist-practitioner model and is designed to train students to conduct basic and applied research and provide professional training in psychological assessment, therapy, and other psychosocial and instructional interventions, professional consultation, and prevention.

Opportunities are available for research and professional work with infants, young children, adolescents, adults, and families. The degrees are intended to meet the academic requirements of the College of Psychologists of Ontario (CPO) for registration as a Psychological Associate (MA) or Psychologist (PhD).

The curriculum of the SCCP program is designed to establish a strong foundation of core knowledge and skills early in the program, with students free to specialize later on. The program reflects a mix of courses and training opportunities.

A systemic approach is the basis for the training that is provided in assessment and intervention. The knowledge and skills necessary for the practice of school psychology and clinical child psychology overlap considerably, and experience in school and clinical settings complement and enhance each other. Therefore, over the course of the program of study, students are required to undertake practica in both school and clinical child settings.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- Normally, an appropriate bachelor's degree in psychology or its equivalent and a University of Toronto MA in School and Clinical Child Psychology or its equivalent. The usual admission standard is equivalency to a University of Toronto A– or better in the master's degree. A limited number of outstanding applicants holding equivalent bachelor's and master's degrees in psychology from elsewhere may be considered. However, if the master's program was not equivalent to the University of Toronto MA in School and Clinical Child Psychology, the student will be required to take additional courses to receive equivalent training.
- Cognate course requirements. 1.0 full-course equivalent (FCE) at the senior undergraduate level, or 0.5 FCE at the graduate level, in each of the following cognate areas: Biological Bases of Behaviour, Cognitive/Affective Bases of Behaviour, Social Bases of Behaviour, and History and Systems of Psychology.
- Normally, an appropriate bachelor's degree in psychology or its equivalent and a University of Toronto MA in School and Clinical Child Psychology or its equivalent. The usual admission standard is equivalency to a University of Toronto A– or better in the master's degree. A limited number of outstanding applicants holding equivalent bachelor's and master's degrees in psychology from elsewhere may be considered. However, if the master's program was not equivalent to the University of Toronto MA in School and Clinical Child Psychology, the student will be required to take additional courses to receive equivalent training.
- Cognate course requirements. 1.0 full-course equivalent (FCE) at the senior undergraduate level, or 0.5 FCE at the graduate level, in each of the following cognate areas: Biological Bases of Behaviour, Cognitive/Affective Bases of Behaviour, Social Bases of Behaviour, and History and Systems of Psychology.

Program Requirements

- Students must complete 5.5 FCEs, including a doctoral practicum course and an internship course, as follows:
  - APD3202H A Foundation of Program Evaluation in Social Sciences (RM) (0.5 FCE).
  - APD3222H Approaches to Psychotherapy Across the Lifespan (0.5 FCE), normally taken in Year 1.
  - APD3241H+ Seminar and Practicum in Clinical Assessment and Intervention, normally taken in Year 2. The practicum portion of APD3241H+ consists of 500 hours (two days a week from September to June) and is normally taken in a clinical setting. Students must complete APD3241H+ in order to remain in good standing and be permitted to continue in the program.
  - APD3260H Psychodiagnostic Systems (0.5 FCE).
  - APD5284Y+ Assessment and Intervention with Culturally and Linguistically Diverse Children, Youth, and Families (1.0 FCE).
  - 0.5 FCE from the Psychosocial Interventions course menu:
    - APD3224H Advanced Proactive Behavioural and Cognitive-Behavioural Interventions* or APD3231H Psychodynamic Bases of Therapy*.
    * Note: the course is offered every other year. Students interested in other courses that may fulfil the Psychosocial Interventions requirement must receive approval from the SCCP Program Coordinator.
- 1.0 elective FCE.
- APD3242Y Internship in School and Clinical Child Psychology (1.0 FCE). The internship consists of a 1,600-hour placement, normally taken on a full-time basis over the course of a year in the final year of the student's program.
- A comprehensive examination. The purpose of the SCCP comprehensive examination is to:
  - Ensure an adequate level of psychological knowledge for professional functioning as a practitioner, academic, and/or researcher.
  - Demonstrate an ability to integrate information at the accepted standard for a doctoral student.
- A doctoral dissertation.
  - Students must have successfully completed all coursework, passed the comprehensive examination, and have their dissertation completed or well underway, prior to commencing their internship.
  - For each missing cognate course requirement (see Cognitive/Affective, Social, or Biological Bases of Behaviour; Admission Requirements above), students are required to take a 0.5 FCE course from the applicable course menu, which can be found on the departmental website and in the Applied Psychology and Human Development program guidelines. Students may use their elective course to cover one of these requirements.
  - In addition to the above course requirements, students who have not taken a previous child development course must take APD1201H Childhood and Adolescent Development. Students who have not taken a previous psychology course or its equivalent must take JOI1287H Introduction to Applied Statistics (RM).
  - Students must complete APD3241H+ Seminar and Practicum in Clinical Assessment and Intervention in order to remain in good standing and be permitted to continue in the program.
  - Students who are required to take APD1215H, APD1216H, and APD1218H in addition to other courses in the PhD (which is the case for most students coming into the
Program from elsewhere) must achieve a minimum of A- in at least one of APD1215H Psychological Assessment of School-Aged Children and APD1216H Psychoeducational Assessment, and must complete APD1218H+ Seminar and Practicum in School-Based Assessment, Consultation, and Intervention in order to remain in good standing and be permitted to continue in the program. Failure to meet these criteria will normally result in a recommendation to the School of Graduate Studies to terminate the student’s registration in the program.

- Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.

**Program Length**

5 years full-time

**Time Limit**

6 years full-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**APHD: School and Clinical Child Psychology MA and PhD Courses**

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services' course schedule.

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<td>APD1205H</td>
<td>Ethical Issues in Applied Psychology</td>
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<td>APD1207H</td>
<td>Counselling Topics in Sexual Orientation and Gender Identity Diversity</td>
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<td>APD1215H</td>
<td>Psychological Assessment of School-Aged Children</td>
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<td>APD1216H</td>
<td>Psychoeducational Assessment</td>
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<td>Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children</td>
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<td>APD1218H+</td>
<td>Seminar and Practicum in School-Based Assessment, Consultation, and Intervention</td>
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<td>APD1222H</td>
<td>Approaches to Psychotherapy-Lifespan</td>
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<td>APD1228H</td>
<td>Couples Counselling</td>
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<td>Cognitive Development and Applications</td>
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<td>APD1236H</td>
<td>Developmental Psychopathology</td>
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<td>APD1245H</td>
<td>Brief Strategies in Counselling and Psychotherapy</td>
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<td>APD1251H</td>
<td>Reading in a Second Language</td>
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<td>APD1271H</td>
<td>Perspectives on Executive Functions in Education: From Theory to Practice</td>
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<td>Psychology and Education of Children with Learning Disabilities</td>
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<td>APD1290H</td>
<td>Indigenous Healing in Counselling and Psychoeducation</td>
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<td>APD1291H</td>
<td>Addictive Behaviours: Approaches to Assessment and Intervention</td>
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<td>APD1295H</td>
<td>Adolescent Mental Health: An Examination of Risk and Resilience (Prerequisites: APD1249H and APD1297H.)</td>
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<tr>
<td>APD1299H</td>
<td>Language Acquisition and Development</td>
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<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM)</td>
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<tr>
<td>APD3204H</td>
<td>Contemporary History and Systems in Human Development and Applied Psychology</td>
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<td>APD3221H</td>
<td>Cross-Cultural Perspectives on Children's Problems</td>
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<td>Approaches to Psychotherapy Across the Lifespan</td>
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<td>Advanced Proactive Behavioural and Cognitive-Behavioural Interventions</td>
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<td>Advanced Social and Emotional Assessment Techniques</td>
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## Individual Reading and Research Courses

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<th>Course Title</th>
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<tr>
<td>APD2252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Master's Level</td>
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<td>APD3252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level</td>
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*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
Architecture, Landscape, and Design

Architecture, Landscape, and Design: Introduction

Faculty Affiliation

Architecture, Landscape, and Design

Degree Programs

Architecture

MArch

Architecture, Landscape, and Design

PhD

Landscape Architecture

MLA

Urban Design

MUD

• Visual Studies

MVS

• Fields:
  o Curatorial Studies;
  o Studio

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Environmental Studies
  o Landscape Architecture, MLA

• Environment and Health
  o Landscape Architecture, MLA

• Knowledge Media Design
  o Architecture, MArch
  o Landscape Architecture, MLA
  o Urban Design, MUD

• Sexual Diversity Studies
  o Visual Studies, MVS

Overview

The Faculty of Architecture, Landscape, and Design offers professional graduate programs in areas characterized by exceptional change. Globalization and the convergence of new media, new materials, and new building technologies have led to significant economic, technological, and aesthetic shifts. As a leading school of architecture, landscape, forestry, and design in North America, the Faculty is responding to these changing realities.

The greater Toronto region serves as a dynamic laboratory for critical studies and the exploration of design alternatives of international significance. Students also have access to Toronto’s large professional design community. Students and faculty are incredibly cosmopolitan in sensibility, hailing from every part of the world, with their work crossing geographic and cultural boundaries. The city’s multicultural networks and international connections make the Faculty a powerful place to start a career.

The Faculty has grown exceptionally in recent years with the hiring of new faculty and the revamping of its master's programs. With architecture, landscape architecture, forestry, urban design, and visual studies sharing facilities, the Faculty benefits from rich collaborations and crossover between related disciplines.

The growth has led to the recent construction of a new building which doubles the Faculty’s size and creates a new and unprecedented centre at the University of Toronto for education, research, and public outreach on architecture, urbanism, visual arts, landscape, and conservation.

Contact and Address

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PhD program: research@daniels.utoronto.ca
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University of Toronto
1 Spadina Crescent
Toronto, Ontario M5S 2J5
Canada

Architecture, Landscape, and Design: Graduate Faculty

Full Members

Anderson, Christy - BA, MA, PhD
Chaouni, Aziza - BScCE, MArch
Du, Juan - BDesign, MArch, PhD (Dean)
Farhat, Georges - MArch, PhD
Harwood, John - PhD
Hupfield, Maria - BA, MFA
Jakubiec, Alstan - BArch, MArch, DPhil
Kesik, Ted - BASc, MASc, DPhil
LeCavalier, Jesse - BA, MArch, DSc
Architecture, Landscape, and Design:
Architecture MArch

Master of Architecture

Program Description

The Master of Architecture (MArch) is a professional degree program and provides a thorough base of knowledge in history, theory, technology, ecology, society, and professional practice, while developing skills in design through an intensive sequence of design studio courses. These are supported by courses in visual communication and architectural representation including computer modelling and other new media. The program aims to develop critical, creative, and independent thinking and research that responds to current design issues and societal changes. The greater Toronto region is used as an urban laboratory for the development of new knowledge and forms of practice.

In Canada, the Canadian Architectural Certification Board (CACB) is the sole agency authorized by the Canadian Architectural Licensing Authorities (CALA) to accredit Canadian professional degree programs in architecture for the purposes of architectural licensure.

MArch Program (3-Year Option)

The 3-year option within the MArch program is accredited by the Canadian Architectural Certification Board. Graduates are eligible to begin the process of professional licensure to become an Architect in North America. The qualification is also transferable to many other countries and regions; students are advised to inquire with their local licensing body.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- A bachelor's degree (BA, BSc, BASc, BES, BFA, BCom) with a final-year grade point average of at least mid-B.
- Recommended: courses in secondary calculus, secondary physics, and university-level architectural history (0.5 course equivalent [FCE]).
- Some preparation or experience in architectural design or the creative arts is encouraged, but not required, such as hand or digital drawing, film or animation, graphic design, or sculpture. This program is suitable for those without formal training in design or the arts; graduates of any discipline are encouraged to apply.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- The course of study is a rigorous full-time, comprehensive program and prepares graduates for the full range of professional activities in architecture. The core program is extensive, and students are required to use their electives to develop an area of special skill and knowledge through an independent study program that culminates in a design thesis.
- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the
Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.

- Students who complete their Master of Architecture program and are eligible to graduate will have their relevant information automatically forwarded by the John H. Daniels Faculty of Architecture, Landscape, and Design to the Canadian Architectural Certification Board (CACB), unless the student opts out in writing. The certification confirms the individual’s academic qualifications in compliance with the Canadian Education Standard (CES) in Architecture for entry to the profession. CACB grants and issues certification to applicants who meet the Education Standard and maintains a National Register of those certified and confidential records of all pertinent documentation for all applicants.

- Coursework. Students must complete a total of 16.0 full-course equivalents (FCEs) as follows:
  - 13.5 FCEs in core courses:
    - 4.0 FCEs: Design Studio
    - 2.0 FCEs: Design Studio Research
    - 0.5 FCE: Research Methods
    - 0.5 FCE: Visual Communication
    - 1.0 FCE: History
    - 1.0 FCE: Design Technology
    - 3.5 FCEs: Technics and Planning
    - 1.0 FCE: Professional Practice
  - 2.5 elective FCEs, of which 0.5 FCE must be in the History and Theory category.

Program Length

6 sessions full-time (typical registration sequence: F/W/F/W/F/W)

Time Limit

4 years full-time

MArch Program (2-Year: Second-Year Advanced-Standing Option)

The 2-year option within the MArch program is accredited by the Canadian Architectural Certification Board. Graduates are eligible to begin the process of professional licensure to become an Architect in North America. The qualification is also transferable to many other countries and regions; students are advised to inquire with their local licensing body.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design’s additional admission requirements stated below.
- An appropriate non-professional bachelor’s degree in architectural studies or environmental design, or a comparable degree focusing on the built environment.
- Admission to the advanced-standing option is based on the merits of the student’s overall academic background and strength of design portfolio as evaluated by the MArch admissions committee.

- Required: minimum previous completion of three design studio courses, two courses in visual communications or representation, two courses in architecture history and theory (one in 20th-century), and two courses in architectural technology and ecology.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- The course of study is a rigorous full-time, comprehensive program and prepares graduates for the full range of professional activities in architecture. The core program is extensive, and students are required to use their electives to develop an area of special skill and knowledge through an independent study program that culminates in a design thesis.
- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student’s registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- Students who complete their Master of Architecture program and are eligible to graduate will have their relevant information automatically forwarded by the John H. Daniels Faculty of Architecture, Landscape, and Design to the Canadian Architectural Certification Board (CACB), unless the student opts out in writing. The certification confirms the individual’s academic qualifications in compliance with the Canadian Education Standard (CES) in Architecture for entry to the profession. CACB grants and issues certification to applicants who meet the Education Standard and maintains a National Register of those certified and confidential records of all pertinent documentation for all applicants.

- Coursework. Students must complete a total of 10.5 full-course equivalents (FCEs) as follows:
  - 8.0 FCEs in core courses:
    - 2.0 FCEs: Design Studio
    - 2.0 FCEs: Design Studio Research
    - 0.5 FCE: Research Methods
    - 0.5 FCE: Design Technology
    - 2.0 FCEs: Technics and Planning
    - 1.0 FCE: Professional Practice
  - 2.5 elective FCEs, of which 0.5 FCE must be in the History and Theory category.
Program Length
4 sessions full-time (typical registration sequence: F/W/F/W)

Time Limit
4 years full-time

MArch Program (1-Year: Post-Professional
Advanced-Standing Option)

The 1-year option within the MArch program is ideal for those who wish to undertake a graduate-level, academic research project, independent of the pathway to professional licensure. Those who wish to become a licensed Architect should consider the 2- or 3-year program options above.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- A post-professional advanced-standing option is available for students who are interested in pursuing advanced studies in architecture beyond their professional degree.
- Applicants must have completed all requirements for an accredited architectural professional degree from a recognized university.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- The post-professional advanced-standing option does not grant a professionally accredited degree.

Program Requirements

- The course of study is a rigorous full-time, comprehensive program and prepares graduates for the full range of professional activities in architecture. The core program is extensive, and students are required to use their electives to develop an area of special skill and knowledge through an independent study program that culminates in a design thesis.
- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- Each student's program of study must receive the approval of the Program Director and, in general, shall consist of a research or design project on which a thesis must be submitted. Faculty members have research expertise in the following areas of interest, which students may pursue: Computation and Fabrication; Health and Society; and Sustainability and Environment.
- Coursework. Students must complete a total of 6.0 full-course equivalents (FCEs) as follows:
  - 4.0 FCEs in core courses:
    - 0.5 FCE: ALA4010H Field Course
    - 0.5 FCE: ALA4020H Thesis Preparation
    - 1.0 FCE: ALA4021Y Thesis I
    - 1.5 FCE: ALA4022Y Thesis II
    - 0.5 FCE: ALA4030H Colloquium
  - 2.0 elective FCEs, of which 1.0 FCE must be in the student's area of interest.

Program Length
2 sessions full-time (typical registration sequence: F/W)

Time Limit
3 years full-time

Architecture, Landscape, and Design: Architecture MArch Courses

Not all electives are offered every year. Please check the timetable for current listings available.

Core Courses

Design Studio

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC1011Y</td>
<td>Design Studio 1</td>
</tr>
<tr>
<td>ARC1012Y</td>
<td>Design Studio 2</td>
</tr>
<tr>
<td>ARC2013Y</td>
<td>Design Studio 3</td>
</tr>
<tr>
<td>ARC2014Y</td>
<td>Design Studio 4</td>
</tr>
</tbody>
</table>

Design Studio Research

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC3020Y</td>
<td>Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y)</td>
</tr>
<tr>
<td>LAN3016Y</td>
<td>Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
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</tr>
<tr>
<td>URD2013Y</td>
<td>Urban Design Studio Options (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y)</td>
</tr>
<tr>
<td>ARC3021Y</td>
<td>Design Studio Research 2 (prerequisite: ARC3020Y; exclusion: ARC4018Y)</td>
</tr>
<tr>
<td>ARC1022H</td>
<td>Design Technology 1</td>
</tr>
<tr>
<td>ARC2023H</td>
<td>Design Technology 2</td>
</tr>
<tr>
<td>ARC1031H</td>
<td>Historical Perspectives on Topics in Architecture 1</td>
</tr>
<tr>
<td>ARC1032H</td>
<td>Historical Perspectives on Topics in Architecture 2</td>
</tr>
<tr>
<td>ALA4010H</td>
<td>Field Course</td>
</tr>
<tr>
<td>ALA4020H</td>
<td>Thesis Preparation</td>
</tr>
<tr>
<td>ALA4021Y</td>
<td>Thesis I (prerequisite: ALA4020H)</td>
</tr>
<tr>
<td>ALA4022Y</td>
<td>Thesis II (prerequisite: ALA4021Y)</td>
</tr>
<tr>
<td>ALA4030H</td>
<td>Colloquium (prerequisites: ALA4010H and ALA4020H; exclusion: ALD4030H)</td>
</tr>
<tr>
<td>ARC3051H</td>
<td>Professional Practice 1</td>
</tr>
<tr>
<td>ARC3052H</td>
<td>Professional Practice 2</td>
</tr>
<tr>
<td>ARC2017H</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ARC1041H</td>
<td>Building Science 1</td>
</tr>
<tr>
<td>ARC1043H</td>
<td>Building Science 2</td>
</tr>
<tr>
<td>ARC1046H</td>
<td>Structures 1</td>
</tr>
<tr>
<td>ARC2042H</td>
<td>Site Engineering and Ecology</td>
</tr>
<tr>
<td>ARC2046H</td>
<td>Structures 2</td>
</tr>
<tr>
<td>ARC2047H</td>
<td>Building Science 3</td>
</tr>
<tr>
<td>ARC2048H</td>
<td>Building Science 4</td>
</tr>
<tr>
<td>ARC1021H</td>
<td>Visual Communications</td>
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<td>ARC3600H</td>
<td>Selected Topics in the History and Theory of Architecture and Health</td>
</tr>
<tr>
<td>ARC3625H</td>
<td>Selected Topics in Advanced Computer Applications</td>
</tr>
<tr>
<td>ARC1100H</td>
<td>Selected Topics in Design</td>
</tr>
<tr>
<td>ARC2015H</td>
<td>Global Architecture: Urban Analysis and Documentation</td>
</tr>
<tr>
<td>ARC1035H</td>
<td>Toronto Architecture and Urban Form</td>
</tr>
<tr>
<td>ARC3031H</td>
<td>Analysis of Architectural Form</td>
</tr>
<tr>
<td>ARC3038H</td>
<td>Global Architecture: History and Theory</td>
</tr>
<tr>
<td>ARC3100H</td>
<td>Selected Topics in Urban Design</td>
</tr>
<tr>
<td>ARC3125H</td>
<td>Selected Topics in Architectural History and Theory</td>
</tr>
<tr>
<td>ARC3300H</td>
<td>Selected Topics in Architectural History and Theory</td>
</tr>
<tr>
<td>ARC3325H</td>
<td>Selected Topics in Architectural History and Theory</td>
</tr>
<tr>
<td>ARC3039H</td>
<td>Independent Study and Research in Architecture</td>
</tr>
<tr>
<td>ARC3700H</td>
<td>Selected Topics in Architecture</td>
</tr>
<tr>
<td>ARC3725H</td>
<td>Selected Topics in Architecture</td>
</tr>
<tr>
<td>ARC3705H</td>
<td>Selected Topics in Architecture</td>
</tr>
</tbody>
</table>
This full-time program normally begins in September.

The PhD program in Architecture, Landscape, and Design engages students in advanced research from an interdisciplinary approach to architecture, landscape, and urban design. The program addresses cultural, social, environmental, historical, and technological questions of the art and design disciplines and the built environment. The program is intended for students entering careers that demand a syncretic approach to research in design and related disciplines.

This full-time program normally begins in September.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design’s additional admission requirements stated below.
- An appropriate master’s degree with an average grade of at least A–. A professional degree in a design discipline is highly desirable, but applicants with a master’s degree in a related discipline in the humanities and social sciences may be considered. An additional specialized program of study may be proposed for successful applicants without professional training.
- A writing sample in the form of a substantial research paper or publication.
- Recommendation from three referees.
- A two-page proposal that indicates a topic of research within a design discipline, possible sub-field(s) (if desired), and potential supervisors. Although letters of commitment from faculty members are not required, the proposed topic must be congruent with the interests and expertise of at least one member of the PhD standing committee. The admissions committee will obtain commitment from the potential supervisor before admitting an applicant, and the applicant will be informed of this in the letter of offer.
- A portfolio of creative work may also be requested where it is relevant to the applicant’s proposed area of research and the degree to which it may require technical skills typically gained in a professional degree program. For example, this could pertain to an applicant whose proposal includes producing renderings. Questions about whether to include a portfolio in an application should be directed to the Program Director or the applicant’s prospective supervisor prior to the application deadline.

Program Requirements

- **Coursework.** Students must complete a total of 6.0 full-course equivalents (FCEs) including:
  - ALD4030H Doctoral Research Colloquium (0.5 FCE).
  - ALD4040H Theories and Methods (0.5 FCE).
  - ALD4050H Research Practicum (0.5 FCE; Credit/No Credit).
  - ALD4060H Preparation for Thesis (0.5 FCE; Credit/No Credit).
  - 4.0 elective FCEs chosen from advanced (3000 and 4000 series) graduate-level courses offered by the John H. Daniels Faculty of Architecture, Landscape, and Design. Depending on their field of study, students may also take advanced graduate courses in cognate disciplines across the University, pending the approval of the Faculty and in consultation with their supervisors.
- To complete the chosen thesis topic, students may be required to take additional courses or acquire other skills. This will be determined by the supervisor and the Director of Graduate Studies and may include competence in another language.
- **Comprehensive examinations.** All PhD students must complete a two-part comprehensive examination normally before their second Summer session. Successful completion of the examinations is required to achieve PhD candidacy. The exam’s specific nature and scope are to be determined in consultation with the student’s supervisor.
  - The first part, normally to be completed in the Summer session of Year 1, is to achieve breadth in the primary area of study so that the student can teach and conduct research within a larger chosen area within the design disciplines. This will usually involve preparing an annotated bibliography in consultation with the supervisor in the early Summer and writing the exam at the end of the Summer. The first part of the exam will consist of a written response to three questions, to be answered during a three-hour writing session that takes place on-site at the J. H. Daniels Faculty.
  - The second part, normally to be completed during the second session of Year 2, is to achieve depth in a secondary area of study, within the Faculty or beyond, so that the student can master the context for the advanced research they plan to undertake for their thesis. For the secondary area of study, most students are expected to specialize in one area of study of the design disciplines (for example, architectural history). Alternatively, for this requirement students may focus on a secondary area of study. (For example, computational technologies.) This exam may be administered by a faculty member other than the supervisor, to be determined by the student in
consultation with their supervisor. This second part can take one of two formats:

- a second annotated bibliography to achieve depth in a sub-section of the primary area of study;
- a course syllabus with readings and outlines of lectures, themes for tutorial discussions, as well as a minimum of three lectures drawn from across the syllabus.

- Both parts of the examination are marked on a pass/fail basis. An oral examination will follow the completion of the second part of the exam. The oral examination will last no more than 90 minutes.
- A second attempt of the comprehensive examinations will be allowed within six months, only on the recommendation of the student’s supervisor. If the student fails again, their registration will be terminated. The student must pass both parts of the comprehensive examinations before permission to submit a thesis proposal will be granted.

**Thesis.** Following completion of the comprehensive exam, the student’s supervisory committee will be formed. This will take place no later than the Summer of Year 2 to allow the committee to advise on the development of the student’s thesis proposal.

- No later than the beginning of Year 3, the student must submit to the PhD program director a thesis proposal that has been approved by the student’s supervisory committee. Once the thesis proposal has been approved, the student will achieve candidacy.
- The doctoral candidate will then proceed to researching and writing the thesis. The student must meet with their thesis supervisory committee within three months of submitting the thesis proposal; thereafter, the candidate is required to meet at least once a year with the supervisory committee.
- By the end of Year 4, the candidate should complete a thesis based on original research and the thesis should make a significant contribution to the area of study. The supervisory committee must approve the completed thesis before it is submitted for examination.
- The candidate will defend the thesis at the Doctoral Final Oral Examination.

**Program Length**

4 years full-time

**Time Limit**

6 years full-time

**Elective Courses**

Not all electives are offered every year. Please check the timetable for current listings available from the Summer session. Electives are to be selected from advanced (3000 and 4000 series) graduate-level courses offered at the Daniels or other Faculties. These include the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC3031H</td>
<td>Analysis of Architectural Form</td>
</tr>
<tr>
<td>ARC3100H to ARC3125H</td>
<td>Selected Topics in Urban Design</td>
</tr>
<tr>
<td>ARC3200H to ARC3225H</td>
<td>Selected Topics in Advanced Computer Applications</td>
</tr>
<tr>
<td>ARC3300H to ARC3325H</td>
<td>Selected Topics in Architectural History and Theory</td>
</tr>
<tr>
<td>ARC3400H to ARC3425H</td>
<td>Selected Topics in Architecture and Technology</td>
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<tr>
<td>ARC3500H to ARC3525H</td>
<td>Selected Topics in Sustainable Design</td>
</tr>
<tr>
<td>ARC3600H to ARC3625H</td>
<td>Selected Topics in the History and Theory of Architecture and Health</td>
</tr>
<tr>
<td>ARC3700H to ARC3725H</td>
<td>Selected Topics in Architecture</td>
</tr>
<tr>
<td>ARC4090H</td>
<td>Directed Reading in Design (Credit/No Credit)</td>
</tr>
<tr>
<td>ARC4500H to ARC4510H</td>
<td>Selected Topics in Professional Practice</td>
</tr>
<tr>
<td>LAN3900H to LAN3910H</td>
<td>Landscape Architecture Topics: History, Theory, Criticism</td>
</tr>
<tr>
<td>VIS3001H</td>
<td>Advanced Readings in Visual Studies</td>
</tr>
<tr>
<td>VIS3002H</td>
<td>Advanced Readings in Curatorial Studies</td>
</tr>
<tr>
<td>VIS3003H</td>
<td>Special Topics in Art and Culture</td>
</tr>
</tbody>
</table>

**Core Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALD4030H</td>
<td>Doctoral Research Colloquium</td>
</tr>
<tr>
<td>ALD4040H</td>
<td>Theories and Methods</td>
</tr>
</tbody>
</table>
Architecture, Landscape, and Design: Landscape Architecture MLA

Master of Landscape Architecture

Program Description

The Master of Landscape Architecture (MLA) is a professional program that focuses on urban and regional landscape architecture within a studio-based curriculum. Integrated courses in design; visual communication and modelling; history, theory, and criticism; site engineering and material technologies; horticulture, ecology, hydrology; professional practice and research methods seminars, as well as options for electives, provide a comprehensive professional education in landscape architecture. The program prepares students with a strong base in the fundamentals of the profession, while fostering innovative thinkers able to work collaboratively with allied disciplines, in preparation for becoming the next generation of leaders in landscape architecture.

MLA Program (3-Year Option)

The 3-year option within the MLA program is accredited by the Landscape Architecture Accreditation Council. Graduates are eligible to begin the process of professional licensure to become a Landscape Architect in North America. The qualification is also transferable to many other countries and regions; students are advised to inquire with their local licensing body.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- A bachelor's degree (such as BA, BSc, BASc, BES, BFA, BCom) with a minimum average of mid-B.
- Some preparation or experience in architectural design or the creative arts is encouraged, but not required, such as hand or digital drawing, film or animation, graphic design, or sculpture. This program is suitable for those without formal training in design or the arts; graduates of any discipline are encouraged to apply.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- Coursework. Students must complete a total of 15.5 full-course equivalents (FCEs) as follows:
  - 14.5 FCEs in core courses:
    - 4.0 FCEs: Design Studio
      - 1.0 FCE: Design Studio Options
      - 1.5 FCEs: Design Studio Thesis
      - 2.0 FCEs: Visual Communication
      - 2.0 FCEs: History, Theory, Criticism
      - 1.5 FCEs: Technology
      - 1.5 FCEs: Environment
      - 1.0 FCE: Professional Practice and Research Methods
    - 1.0 elective FCE.

Program Length

6 sessions full-time (typical registration sequence: F/W/F/W/F/W)

Time Limit

3 years full-time

MLA Program (2-Year: Second-Year Advanced-Standing Option)

The 2-year option within the MLA program is accredited by the Landscape Architecture Accreditation Council. Graduates are eligible to begin the process of professional licensure to become a Landscape Architect in North America. The qualification is also transferable to many other countries and regions; students are advised to inquire with their local licensing body.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- An appropriate bachelor's degree in landscape architecture, architecture, architectural studies, or environmental design, or a comparable degree focusing on the design of landscapes and the built environment.
- Admission is based on the merits of the applicant's overall academic background and strength of design portfolio as evaluated by the admissions committee.
- Minimum previous completion of three design studio courses, two courses in digital visual representation (including Rhinoceros, Illustrator, Laser Cutting), two courses in landscape architecture history and theory (one in 20th-century), and two courses in landscape architecture...
site engineering (i.e., site grading) and planting design, horticulture, urban ecology, or forest ecology.

- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- **Coursework.** Students must complete a total of 10.5 full-course equivalents (FCEs) as follows:
  - 9.5 FCEs in core courses as follows:
    - 2.0 FCEs: Design Studio
    - 1.0 FCE: Design Studio Options
    - 1.5 FCEs: Design Studio Thesis
    - 1.0 FCE: Visual Communication
    - 0.5 FCE: History, Theory, Criticism
    - 1.0 FCE: Technology
    - 1.5 FCEs: Environment
    - 1.0 FCE: Professional Practice and Research Methods
  - 1.0 elective FCE.

Program Length

4 sessions full-time (typical registration sequence: F/W/F/W)

Time Limit

3 years full-time

MLA Program (1-Year: Post-Professional Advanced-Standing Option)

The 1-year option within the MLA program is ideal for those who wish to undertake a graduate-level, academic research project, independent of the pathway to professional licensure. Those who wish to become a licensed Landscape Architect should consider the 2- or 3-year program options above.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- A post-professional advanced-standing option is available for students who are interested in pursuing advanced study beyond their professional degree.
- Applicants must have completed all requirements for an accredited professional degree from a recognized university.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- The post-professional advanced-standing option does not grant a professionally accredited degree.

Program Requirements

- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- Each student's program of study must receive the approval of the Program Director and, in general, shall consist of a research or design project on which a thesis must be submitted. Faculty members have research expertise in the following areas of interest, which students may pursue: Computation and Fabrication; Health and Society; and Sustainability and Environment.
- **Coursework.** Students must complete a total of 6.0 full-course equivalents (FCEs) as follows:
  - 4.0 FCEs in core courses:
    - 0.5 FCE: ALA4010H Field Course
    - 0.5 FCE: ALA4020H Thesis Preparation
    - 1.0 FCE: ALA4021Y Thesis I
    - 1.5 FCE: ALA4022Y Thesis II
    - 0.5 FCE: ALA4030H Colloquium
  - 2.0 elective FCEs, of which 1.0 FCE must be in the student's area of interest.

Program Length

2 sessions full-time (typical registration sequence: F/W)

Time Limit

3 years full-time
# Architecture, Landscape, and Design: Landscape Architecture MLA Courses

Not all electives are offered every year. Please check the timetable for current listings available.

## Core Courses

### Design Studio

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1011Y</td>
<td>Design Studio 1</td>
</tr>
<tr>
<td>LAN1012Y</td>
<td>Design Studio 2</td>
</tr>
<tr>
<td>LAN2013Y</td>
<td>Design Studio 3 (prerequisite: LAN1012Y)</td>
</tr>
<tr>
<td>LAN2014Y</td>
<td>Design Studio 4</td>
</tr>
<tr>
<td>LAN3016Y or URD2013Y or ARC3020Y</td>
<td>Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y) or Urban Design Studio Research (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y) or Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y)</td>
</tr>
<tr>
<td>LAN3017Y</td>
<td>Design Studio Thesis</td>
</tr>
</tbody>
</table>

### Environment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1041H</td>
<td>Field Studies 1</td>
</tr>
<tr>
<td>LAN1043H</td>
<td>Field Studies 2</td>
</tr>
<tr>
<td>LAN2045H</td>
<td>Landscape Ecology I</td>
</tr>
<tr>
<td>LAN2046H</td>
<td>Landscape Ecology II (prerequisite: LAN2045H)</td>
</tr>
<tr>
<td>LAN2047H</td>
<td>Landscape Hydrology I</td>
</tr>
<tr>
<td>LAN2048H</td>
<td>Landscape Hydrology II (prerequisite: LAN2047H)</td>
</tr>
</tbody>
</table>

### History, Theory, Criticism

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1031H</td>
<td>History, Theory, Criticism 1</td>
</tr>
<tr>
<td>LAN1032H</td>
<td>History, Theory, Criticism 2</td>
</tr>
<tr>
<td>LAN1037H</td>
<td>Plants and Design I</td>
</tr>
<tr>
<td>LAN1038H</td>
<td>Plants and Design II (prerequisite: LAN1037H)</td>
</tr>
<tr>
<td>LAN2037H</td>
<td>Contemporary Landscape Theory</td>
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</table>

## Post Professional

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ALA4010H</td>
<td>Field Course</td>
</tr>
<tr>
<td>ALA4020H</td>
<td>Thesis Preparation</td>
</tr>
<tr>
<td>ALA4021Y</td>
<td>Thesis I (prerequisite: ALA4020H)</td>
</tr>
<tr>
<td>ALA4022Y</td>
<td>Thesis II (prerequisite: ALA4021Y)</td>
</tr>
<tr>
<td>ALA4030H</td>
<td>Colloquium (prerequisites: ALA4010H and ALA4020H; exclusion: ALD4030H)</td>
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## Proseminar

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN3051H</td>
<td>Landscape Architecture Research Methods</td>
</tr>
<tr>
<td>LAN3052H</td>
<td>Professional Practice</td>
</tr>
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</table>

## Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1047H</td>
<td>Site Engineering I</td>
</tr>
<tr>
<td>LAN1048H</td>
<td>Site Engineering II</td>
</tr>
<tr>
<td>LAN2042H</td>
<td>Landscape Materials, Assemblies, Techniques</td>
</tr>
<tr>
<td>LAN3045H</td>
<td>Advanced Site Technologies</td>
</tr>
</tbody>
</table>

## Visual Communication

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1021H</td>
<td>Visual Communication 1</td>
</tr>
<tr>
<td>LAN1022H</td>
<td>Visual Communication 2</td>
</tr>
<tr>
<td>LAN2023H</td>
<td>Intermediate Visual Communication</td>
</tr>
<tr>
<td>LAN3025H</td>
<td>Advanced Visual Communication</td>
</tr>
</tbody>
</table>

## Elective Courses

### Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN3200H</td>
<td>Landscape Architecture Topics: Design</td>
</tr>
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### Environment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>LAN3300H</td>
<td>Landscape Architecture Topics: Environment</td>
</tr>
<tr>
<td>LAN3500H</td>
<td>Landscape Architecture Topics: Plants</td>
</tr>
</tbody>
</table>

### Common Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN3016Y</td>
<td>Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y)</td>
</tr>
<tr>
<td>URD2013Y</td>
<td>Urban Design Studio Research (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y)</td>
</tr>
<tr>
<td>ARC3020Y</td>
<td>Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y)</td>
</tr>
</tbody>
</table>
Architecture, Landscape, and Design

MUD Program (2-Year)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- A professional degree in architecture (BArch or MArch) or landscape architecture (BLA, MLA). Applicants with a degree in urban planning (MCP, MUP, or MScPl) may be considered for admission if they are able to demonstrate design potential in their application portfolio. Applicants may be required to complete design and/or visual communication workshops before they begin the MUD program, to prepare them for the design studio component of the MUD curriculum.
- All applicants must submit a portfolio of design work for review. Admission is based on the merits of the applicant's overall academic background and strength of design portfolio as evaluated by the admissions committee.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's candidacy for the degree program.
- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director, and in consultation with the Office of the Registrar and Student Services in the case of accessibility.
- Coursework. Students must complete a total of 10.0 full-course equivalents (FCEs) as follows:
  - 7.5 FCEs in core courses:
    - 1.0 FCE: Design Studio
    - 2.0 FCEs: Option Design Studio
    - 0.5 FCE: Thesis Preparation and Research
    - 1.5 FCEs: Design Thesis
    - 1.0 FCE: History, Theory, Criticism
    - 1.5 FCEs: other courses
  - 2.5 elective FCEs, of which 1.5 FCEs must be selected from offerings in the History, Theory, Criticism category.

Program Length

4 sessions full-time (typical registration sequence: F/W/F/W)
Time Limit
3 years full-time

Architecture, Landscape, and Design: Urban Design MUD Courses

Not all electives are offered every year. Please check the timetable for current listings available.

Core Courses

Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URD1011Y</td>
<td>Urban Design Studio</td>
</tr>
<tr>
<td>URD1012Y</td>
<td>Urban Design Studio Options</td>
</tr>
<tr>
<td>URD2012Y</td>
<td>Independent Studio in Urban Design (may be undertaken in lieu of an option studio)</td>
</tr>
<tr>
<td>URD2013Y</td>
<td>Urban Design Studio Research</td>
</tr>
<tr>
<td>LAN3016Y</td>
<td>Landscape Design Studio Research (exclusions: ARC3015Y, LAN3016Y)</td>
</tr>
<tr>
<td>URD2015Y</td>
<td>Urban Design Studio Thesis</td>
</tr>
</tbody>
</table>

History, Theory, Criticism

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URD1031H</td>
<td>The History of Toronto Urban Form</td>
</tr>
<tr>
<td>URD1041H</td>
<td>Introduction to Urban Design Theory</td>
</tr>
</tbody>
</table>

Other

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URD1021H</td>
<td>Urban Design Visual Communications</td>
</tr>
<tr>
<td>URD1044H</td>
<td>Urban Design and Development</td>
</tr>
<tr>
<td>URD2014H</td>
<td>Thesis Research and Preparation</td>
</tr>
<tr>
<td>URD2041H</td>
<td>Business and Land Use Planning in Real Estate Development</td>
</tr>
</tbody>
</table>

Elective Courses

History, Theory, Criticism

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URD1200H</td>
<td>Selected Topics in History and Theory of Urban Design</td>
</tr>
<tr>
<td>URD1225H</td>
<td>Selected Topics in Urban Design</td>
</tr>
<tr>
<td>URD1500H</td>
<td>Selected Topics in Urban Design</td>
</tr>
<tr>
<td>URD1525H</td>
<td>Selected Topics in Urban Design</td>
</tr>
</tbody>
</table>

Other

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>URD1022H</td>
<td>Topics in Computer-Aided Urban Design</td>
</tr>
<tr>
<td>URD1042H</td>
<td>Urban Design and Environmental Systems</td>
</tr>
<tr>
<td>URD1300H</td>
<td>Selected Topics in Digital Urbanism</td>
</tr>
</tbody>
</table>

Architecture, Landscape, and Design: Visual Studies MVS

Master of Visual Studies

Program Description

The Master of Visual Studies (MVS) is a two-year, full-time professional program with two fields:

- Curatorial Studies: prepares students for contemporary curatorial practice in the visual arts.
- Studio: prepares students to further their visual art practice.

The program normally begins in September.

Field: Curatorial Studies

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design’s additional admission requirements stated below.
- An appropriate bachelor's degree with significant coursework in humanities and cultural theory from a recognized university, or an appropriate BFA degree from a recognized university.
- Overall average of at least a B+.
- Applications must include:
  - artist's statement that includes a description of the proposed body of work in curatorial to be undertaken during the two-year program;
• full curriculum vitae (CV) with details of exhibition, professional activity, and education;
• documentation of recent curatorial work;
• three letters of recommendation;
• a critical writing sample;
• transcripts;
• a portfolio of previous work dependent on the field of future study.

• Applicants must present a portfolio with documentation of exhibitions including exhibition brochures, curatorial essays, announcement cards, and/or catalogues from curatorial work.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

• **Coursework.** Students must complete a total of 6.0 **full-course equivalents (FCEs)** as follows:
  o 4.5 FCEs from the approved course list for curatorial studies
  o 1.5 FCEs in electives. Elective courses are selected in consultation with the student's advisor and are subject to the approval of the Program Director.
• The internship requirement is normally completed during the Summer session between Year 1 and Year 2.
• MVS Curatorial Studies students are supervised by an Advisory Panel made up of the Director of the Visual Studies program (or their designate), a graduate faculty member who will be considered to be the student's Principal Advisor, one of the University of Toronto's gallery directors, and an external reader chosen upon approval of the Principle Advisor and Program Director.
• The graduating thesis project is composed of an exhibition and a qualifying paper.
• **MVS Proseminar,** a non-credit course.
• An FZ (fail) in any one course or a B– grade in any two courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Field: Studio

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.

• An appropriate bachelor's degree with significant coursework in humanities and cultural theory from a recognized university, or an appropriate BFA degree from a recognized university.
• Overall average of at least a B+.
• Applications must include:
  o artist's statement that includes a description of the proposed body of work in studio to be undertaken during the two-year program;
  o full curriculum vitae (CV) with details of exhibition, professional activity, and education;
  o documentation of recent studio work;
  o three letters of recommendation;
  o a critical writing sample;
  o transcripts;
  o a portfolio of previous work dependent on the field of future study.
• Applicants must present a portfolio with documentation of their artworks. Applicants will also include a fully annotated listing for all portfolio materials that provides detailed information about media, year of production, dimensions, part of a series, full running length (in the case of media artworks), and circumstances of display (in the case of installation works and performance works).
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

• **Coursework.** Students must complete a total of 6.0 **full-course equivalents (FCEs)** as follows:
  o 4.5 FCEs from the approved course list for curatorial studies
  o 1.5 FCEs in electives. Elective courses are selected in consultation with the student's advisor and are subject to the approval of the Program Director.
• The internship requirement is normally completed during the Summer session between Year 1 and Year 2.
• MVS Studio students are supervised by an Advisory Panel made up of the Director of the Visual Studies program (or their designate), a studio faculty member of the MVS program who is considered the student's Principal Advisor, a second MVS studio faculty member, and another faculty member (not necessarily a member of the MVS program). The Final Studio Thesis defence requires an external reader chosen upon approval of the Principal Advisor and Program Director.
• The graduating thesis project is composed of an exhibition and a qualifying paper.
• **MVS Proseminar,** a non-credit course.
• An FZ (fail) in any one course or a B– grade in any two courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)
Time Limit

3 years full-time

Architecture, Landscape, and Design: Visual Studies MVS Courses

MVS Curatorial Studies Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIS1000Y</td>
<td>MVS Proseminar</td>
</tr>
<tr>
<td>VIS1004H</td>
<td>Internship</td>
</tr>
<tr>
<td>VIS1010H</td>
<td>Contemporary Art Since 1960</td>
</tr>
<tr>
<td>VIS1020H</td>
<td>Contemporary Art: Theory and Criticism</td>
</tr>
<tr>
<td>VIS1101H</td>
<td>Paradigmatic Exhibitions: History, Theory, Criticism</td>
</tr>
<tr>
<td>VIS1102H</td>
<td>MVS Curatorial Research</td>
</tr>
<tr>
<td>VIS2000Y</td>
<td>MVS Proseminar</td>
</tr>
<tr>
<td>VIS2002H</td>
<td>MVS Research and Writing</td>
</tr>
<tr>
<td>VIS2101Y</td>
<td>MVS Curatorial Studies Exhibition Project</td>
</tr>
<tr>
<td>VIS2102H</td>
<td>MVS Curatorial Studies Collaboration</td>
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MVS Studio Courses

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<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>VIS1000Y</td>
<td>MVS Proseminar</td>
</tr>
<tr>
<td>VIS1001H</td>
<td>Interdisciplinary Studio Practicum/Critiques I</td>
</tr>
<tr>
<td>VIS1003H</td>
<td>Interdisciplinary Studio Practicum/Critiques II</td>
</tr>
<tr>
<td>VIS1004H</td>
<td>Internship</td>
</tr>
<tr>
<td>VIS1010H</td>
<td>Contemporary Art Since 1960</td>
</tr>
<tr>
<td>VIS1020H</td>
<td>Contemporary Art: Theory and Criticism</td>
</tr>
<tr>
<td>VIS2000Y</td>
<td>MVS Proseminar</td>
</tr>
<tr>
<td>VIS2001H</td>
<td>Studio Practicum/Critiques III</td>
</tr>
<tr>
<td>VIS2002H</td>
<td>MVS Research and Writing</td>
</tr>
<tr>
<td>VIS2003Y</td>
<td>MVS Project</td>
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MVS Elective Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>VIS1005H</td>
<td>Artist in Residence Master Class</td>
</tr>
<tr>
<td>VIS3001H</td>
<td>Advanced Readings in Visual Studies</td>
</tr>
<tr>
<td>VIS3002H</td>
<td>Advanced Readings in Curatorial Studies</td>
</tr>
<tr>
<td>VIS3003H</td>
<td>Special Topics in Art and Culture</td>
</tr>
</tbody>
</table>
Art History: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Art History

MA and PhD

- Fields:
  - Ancient;
  - Medieval;
  - Early Modern;
  - Modern and Contemporary

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - Art History, MA, PhD
- Diaspora and Transnational Studies
  - Art History, MA, PhD
- Jewish Studies
  - Art History, MA, PhD
- Mediterranean Archaeology
  - Art History, PhD
- Sexual Diversity Studies
  - Art History, MA, PhD

Overview

The Department of Art History’s graduate programs emphasize the research, writing, and teaching necessary to pursue a career in academia or museum work. The programs benefit from affiliations at the University with the Centre for Medieval Studies and the Centre for Renaissance and Reformation Studies, as well as resources in Toronto including the Royal Ontario Museum, the Art Gallery of Ontario, the Aga Khan Museum, and the Gardiner Museum.

Contact and Address

Web: arthistory.utoronto.ca
Email: graduate.arthistory@utoronto.ca
Telephone: (416) 946-3960

Graduate Department of Art History
University of Toronto
Sidney Smith Hall
Room 6037A, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Art History: Graduate Faculty

Full Members

Anderson, Christy - BA, MA, PhD
Bear, Jordan - BA, MA, MPH, PhD
Caskey, Jill - AB, MA, MPH, PhD
Cheetham, Mark - BPhil, MA, PhD
Clarke, Joseph - PhD, PhD
Cohen, Adam - PhD
Ewald, Bjoern - AM, PhD
Gu, Yi - BLitt, MMSt, PhD
Harney, Elizabeth - AB, MA, PhD
Jain, Kajri - PhD
Kaplan, Louis - AB, AM, DPhil
Kavaler, Ethan Matt - PhD
Kim, SeungJung - BS, MA, MPH, PhD, PhD (Director of Graduate Studies from Jan. 2022)
Knappett, Carl - MA, PhD (Chair and Graduate Chair; Acting Director of Graduate Studies until Dec. 2021)
Legge, Elizabeth MM - BA, BA, MA, PhD
Levy, Evonne - MFA, PhD
Migwans, Mikinaak - BFA, MA
Periti, Giancarla - PhD
Purtle, Jennifer - BA, MPH, MA, PhD
Ricco, John - BA, MA, PhD
Sohm, Philip - BA, MA, PhD
Syme, Alison - PhD

Members Emeriti

Richardson, Douglas - BA, MA, PhD
Shaw, Joseph - BA, MAT, PhD
Shaw, Maria - PhD

Associate Members

Sapirstein, Philip - PhD, PhD, PhD

Art History: Art History MA

Master of Arts

Program Description

The MA program is a course-based and research-intensive degree designed to prepare art history students for doctoral research, curatorial work, art consultation, heritage programs, cultural journalism, and secondary school teaching.
The MA program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Art History’s additional admission requirements stated below.
- Strong overall grade average in art history and closely related subjects and at least a B+ average in recent senior art history courses. Outstanding applicants with other backgrounds may be considered.

Program Requirements

- **Coursework.** Students must successfully complete a total of 3.0 graduate full-course equivalents (FCEs) as follows:
  - Coursework must be chosen from at least three of four fields: 1) Ancient, 2) Medieval, 3) Early Modern, 4) Modern and Contemporary. No more than 2.0 FCEs may be taken in any one of the four fields.
  - Coursework must also be taken in at least two geographic zones (Western, East Asian, South Asian, African, etc.). Courses without a specific regional focus may count toward the geographical distribution requirement if the student’s final paper is on an appropriate topic.
  - The equivalent of 1.0 FCE may be taken in another graduate department (e.g., Medieval Studies, Near and Middle Eastern Civilizations), subject to approval of the Department of Art History and the other department concerned.
- Reading knowledge of a language other than English (normally French, German, Italian, Arabic, or Chinese); tested in the first session.
- **Orientation to Art Historical Research Methods,** a workshop led by the Department of Art History’s librarian, normally taken in Year 1.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Art History: Art History PhD

Doctor of Philosophy

Program Description

The PhD program is designed to prepare art history students for college and university teaching, museum curatorships, and other research positions.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry after completing a bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Art History’s additional admission requirements stated below.
- Minimum A– average in their master’s program.
- Reading knowledge of two foreign languages relevant to the student’s research.
- Students unable to meet language requirements for particular courses may be refused admission to courses; enrolment in Fall courses is limited and subject to instructor's approval.

Program Requirements

- **Coursework.** Students must successfully complete a total of 3.0 full-course equivalents (FCEs) of graduate courses as follows:
  - FAH5000Y Comprehensive Examinations and Dissertation Topic Reading Course (1.0 FCE; Credit/No Credit) with the student's interim supervisor to prepare for the comprehensive examinations.
  - FAH1001H Methods of Art History (0.5 FCE), a departmental methodology course, must be taken in Year 1. With departmental approval, credit may be given for a research methodology course taken previously.
  - Students are encouraged to take courses reflecting a variety of time periods and geographic zones.
- **Orientation to Art Historical Research Methods,** a workshop for new students, is recommended.
- At the end of each academic year, students’ progress will be reviewed to ensure that they have made satisfactory progress through the program; this includes maintaining full-time status with a GPA of at least A– and completion of all language requirements.
- Students must pass examinations in two foreign languages by the end of Year 2. Students who have completed a language exam during their MA may apply to have the exam counted towards fulfilling one of the two foreign language requirements. The appropriate languages will be set by the interim supervisor in consultation with the Director of Graduate Studies, and additional languages may be required depending on the research needs of the student’s dissertation topic.
- Within Years 1 and 2, students complete coursework and language requirements and secure a prospective supervisor with whom they will discuss plans for the comprehensive examinations.
- Additionally, within Years 1 and 2, students must take a three-part comprehensive examination: 1) the first part focusing on one of the four fields, 2) the second on the student’s dissertation field, and 3) the third (oral) discussing the first two.
Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Art History's additional admission requirements stated below.

- Applicants with a bachelor's degree who have an exceptionally strong academic record; minimum grade average of A– in art history and humanities courses in the last two years.

- Reading knowledge of two foreign languages relevant to the student's research.

- Students unable to meet language requirements for particular courses may be refused admission to courses; enrolment in Fall courses is limited and subject to instructor's approval.

Program Requirements

- Coursework. Students must successfully complete at least 5.5 full-course equivalents (FCEs) in art history as follows:
  - FAH5000Y Comprehensive Examinations and Dissertation Topic Reading Course (1.0 FCE; Credit/No Credit) must be taken in Year 2 with the student's interim supervisor to prepare for the comprehensive examinations.
  - FAH1001H Methods of Art History (0.5 FCE), a departmental methodology course, must be taken in Years 1 and 2. With departmental approval, credit may be given for a research methodology course taken previously.
  - The remaining 4.0 FCEs must be chosen from at least three of the following fields: (1) Ancient, (2) Medieval, (3) Early Modern, (4) Modern and Contemporary. Any course that covers more than one of these time periods may only be used to fulfil one of the FCE distributions.
  - Coursework must be taken in at least two geographic zones (Western, East Asian, South Asian, African, etc.). Courses without a specific regional focus may count toward the geographical distribution requirement if the student's final paper is on an appropriate topic.

- Students must maintain an A– average.

- Orientation to Art Historical Research Methods, a workshop led by the Department of Art History's librarian, normally taken in Year 1.

- Students must pass examinations in two foreign languages by the end of Year 2. Students focusing on Ancient, Medieval, and Renaissance and Baroque will normally be expected to pass the examination in German as one of their two languages. The appropriate languages will be set by the interim supervisor in consultation with the Director of Graduate Studies, and additional languages may be required depending on the research needs of the student's dissertation topic. Language requirements must be completed prior to approval of the dissertation proposal.

- At the beginning of Year 3, students' progress will be reviewed to ensure that they have made satisfactory progress through the program; this includes maintaining full-time status with a GPA of at least A– and completion of all language requirements.

- Within the first three years, students must take a three-part comprehensive examination: 1) the first part focusing on one of the four fields, 2) the second on the dissertation field, and 3) the third (oral) discussing the first two.
  - The exam consists of an in-house written section, a take-home essay, and an oral exam.
  - Upon the completion of all coursework, PhD students must seek out and secure the participation of a prospective supervisor with whom they will discuss plans for the comprehensive examinations.
The student will meet with the Examination Committee (normally made up of at least three members of the department, one of whom will be the prospective dissertation supervisor) in order to define the areas of the examination, the length of study, and such readings and special topics as deemed appropriate.

If a student fails the comprehensive examinations, one further attempt is allowed, no more than three months later. A second failure results in the immediate removal of the student from the program.

Once the student passes the exam, their graduate record will be updated to reflect successful exam completion.

- Immediately following successful completion of comprehensive examinations, students must formally establish their PhD Supervisory Committee. This will include the faculty member acting as the dissertation supervisor, and two other graduate faculty members. These arrangements must be approved by the department's Graduate Program Committee.

- Working with the PhD Supervisory Committee, the student will develop a detailed proposal for their research, to be submitted 3 months after the successful completion of their comprehensive exam. The length and specific nature of the proposal will be determined by the Supervisory Committee and the PhD student. The drafted proposal must be approved, first by the Supervisory Committee, and then by the department's Director of Graduate Studies.

- At some point during the dissertation stage, students will present their work to the faculty and students at a colloquium in an appropriate format and at a time to be determined by the supervisor in consultation with the Director of Graduate Studies.

- **Normal timeline through the program:** By the end of Year 2, students should have completed all course requirements for the degree. By the end of the following year of registration, students should satisfy any remaining requirements, select a thesis committee, pass the comprehensive examination, and submit a thesis proposal. Thereafter, the candidate selects a member of the thesis committee to be the thesis supervisor and begins work on their thesis.

### Program Length

5 years (some students may take longer to complete the program)

### Time Limit

7 years

### Art History: Art History MA, PhD Courses

Not all courses are offered each year. Check the departmental website for course availability under the current timetable.

### Methods

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAH1001H</td>
<td>Methods of Art History</td>
</tr>
</tbody>
</table>

### Ancient

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAH2018H</td>
<td>Art and the Aegean Bronze Age: Contemporary Perspectives</td>
</tr>
<tr>
<td>FAH2021H</td>
<td>Myth and Fantasy in Roman Painting</td>
</tr>
<tr>
<td>FAH2023H</td>
<td>Mind and Materiality: Views from Art History and Archaeology</td>
</tr>
<tr>
<td>FAH2025H</td>
<td>Visual Narrative and Time in Ancient Greek and Roman Art</td>
</tr>
<tr>
<td>FAH2027H</td>
<td>Women and Gender in Ancient Greece</td>
</tr>
<tr>
<td>FAH2028H</td>
<td>Art and the Philosophy of Time</td>
</tr>
<tr>
<td>FAH2029H</td>
<td>The Art of Perception</td>
</tr>
<tr>
<td>FAH2034H</td>
<td>Topics in Roman Imperial Art</td>
</tr>
<tr>
<td>FAH2037H</td>
<td>Empathy, Embodiment, and Emotion in Ancient Art</td>
</tr>
<tr>
<td>FAH2038H</td>
<td>Greek and Roman Sculpture in the Royal Ontario Museum</td>
</tr>
<tr>
<td>FAH2060H</td>
<td>Artisans and Artists in the Ancient Mediterranean</td>
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### Medieval

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FAH114H</td>
<td>Multicultural Arts of Medieval Sicily</td>
</tr>
<tr>
<td>FAH118H</td>
<td>The Medieval Treasury</td>
</tr>
<tr>
<td>FAH119H</td>
<td>Global Medieval Art</td>
</tr>
<tr>
<td>FAH121H</td>
<td>12th-Century Renaissance?</td>
</tr>
<tr>
<td>FAH125H</td>
<td>Medieval Pilgrimage Art and Architecture</td>
</tr>
<tr>
<td>FAH127H</td>
<td>Early Medieval Art</td>
</tr>
<tr>
<td>FAH175H</td>
<td>Early Islamic Architecture: 7th–10th c.</td>
</tr>
<tr>
<td>FAH176H</td>
<td>History of Islamic Cairo (7th–16th c.)</td>
</tr>
<tr>
<td>FAH177H</td>
<td>Building the Islamic Empire: Architecture of the Umayyads</td>
</tr>
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</table>

### Early Modern

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FAH1202H</td>
<td>Correggio and the Problem of Italian Renaissance Art</td>
</tr>
<tr>
<td>FAH1204H</td>
<td>The Cassinese Art of Reform in Renaissance Italy</td>
</tr>
<tr>
<td>FAH1205H</td>
<td>Early Modern Intermediality</td>
</tr>
<tr>
<td>FAH1206H</td>
<td>Artistic Localities in the Early Modern World</td>
</tr>
<tr>
<td>FAH1207H</td>
<td>Formalism and Its Objects</td>
</tr>
<tr>
<td>FAH1221H</td>
<td>Inside the Painter’s Studio</td>
</tr>
<tr>
<td>FAH1229H</td>
<td>Architecture of the Global Renaissance</td>
</tr>
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### Modern and Contemporary

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>FAH1410H</td>
<td>Artwriting, Past and Present</td>
</tr>
<tr>
<td>FAH1411H</td>
<td>Art and Analogy</td>
</tr>
<tr>
<td>FAH1457H</td>
<td>Vernacular Photography</td>
</tr>
<tr>
<td>FAH1458H</td>
<td>Viewing History: The Visual Experience of the Past, 1750–1900</td>
</tr>
<tr>
<td>FAH1463H</td>
<td>Realisms</td>
</tr>
<tr>
<td>FAH1464H</td>
<td>The Recalcitrant Icon</td>
</tr>
<tr>
<td>FAH1471H</td>
<td>The Aesthetics of Democracy</td>
</tr>
<tr>
<td>FAH1475H</td>
<td>Picasso in View of Nanette</td>
</tr>
<tr>
<td>FAH1476H</td>
<td>Surrealism and Art</td>
</tr>
<tr>
<td>FAH1482H</td>
<td>The Time of Art History</td>
</tr>
<tr>
<td>FAH1486H</td>
<td>Bloomsbury and Vorticism</td>
</tr>
<tr>
<td>FAH1488H</td>
<td>The Nature of Landscape</td>
</tr>
<tr>
<td>FAH1489H</td>
<td>Re: Vision (Comparative Histories of the Senses)</td>
</tr>
<tr>
<td>FAH1495H</td>
<td>Art, Empire, Colonization</td>
</tr>
<tr>
<td>FAH1500H</td>
<td>Augmented Reality Art</td>
</tr>
<tr>
<td>FAH1755H</td>
<td>Architecture and the Project of Industrial Modernity</td>
</tr>
<tr>
<td>FAH1756H</td>
<td>Acoustic Space</td>
</tr>
<tr>
<td>FAH1757H</td>
<td>Animal Images</td>
</tr>
<tr>
<td>FAH1758H</td>
<td>What Images Do: Approaches From South Asia</td>
</tr>
<tr>
<td>FAH1759H</td>
<td>Modern Architecture and Its Representations</td>
</tr>
<tr>
<td>FAH1801H</td>
<td>Portraiture in Canada: 1750–1870</td>
</tr>
<tr>
<td>FAH1920H</td>
<td>Primitivism to Globalism: Theories of Otherness in Modern and Contemporary Arts</td>
</tr>
<tr>
<td>FAH1921H</td>
<td>GeoAesthetics</td>
</tr>
<tr>
<td>FAH1922H</td>
<td>Contemporary Art and Ethnography: Renewed Exchanges</td>
</tr>
<tr>
<td>FAH1934H</td>
<td>Cosmopolitan/Comparative Modernisms</td>
</tr>
<tr>
<td>FAH1935H</td>
<td>Contemporary Art Practices and the Modernist Archive</td>
</tr>
<tr>
<td>FAH1936H</td>
<td>The Retro-Modern and the Time of the Contemporary</td>
</tr>
<tr>
<td>FAH1940H</td>
<td>Photography and Humour</td>
</tr>
<tr>
<td>FAH1951H</td>
<td>Contemporary Chinese Art and its Discontents</td>
</tr>
<tr>
<td>FAH1960H</td>
<td>Indigenous Art, Land, and Material Relations in the Great Lakes</td>
</tr>
<tr>
<td>FAH1961H</td>
<td>Art and Activism</td>
</tr>
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</table>

### Reading Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>FAH3000H</td>
<td>Special Studies in History of Art (only 1.0 FCE with this prefix is permitted in any one degree program)</td>
</tr>
<tr>
<td>FAH3011H</td>
<td>Readings in Ancient Art</td>
</tr>
<tr>
<td>FAH3012H</td>
<td>Readings in Medieval Art</td>
</tr>
<tr>
<td>FAH3013H</td>
<td>Readings in Renaissance and Baroque Art</td>
</tr>
<tr>
<td>FAH3014H</td>
<td>Readings in Modern and Contemporary Art</td>
</tr>
<tr>
<td>FAH5000Y</td>
<td>Comprehensive Examinations and Dissertation Topic Reading Course</td>
</tr>
</tbody>
</table>

### Undergraduate/Graduate Courses

Periodically, the department may offer fourth-year undergraduate courses that have been recognized for graduate credit. Please visit the departmental website and discuss with the Graduate Coordinator.

### Relevant Courses in Other Departments

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EAS1229H</td>
<td>Topics in Chinese Aesthetics</td>
</tr>
<tr>
<td>EAS1339H</td>
<td>Topics in Chinese Art Theories</td>
</tr>
<tr>
<td>MSL2240H</td>
<td>The Photographic Record</td>
</tr>
</tbody>
</table>
Astronomy and Astrophysics

Astronomy and Astrophysics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Astronomy and Astrophysics

MSc
PhD

Overview

The David A. Dunlap Department of Astronomy and Astrophysics is actively engaged in a wide range of observational and theoretical research on solar system dynamics, stars, stellar systems, the interstellar medium, the Galaxy, galaxies, quasars, clusters of galaxies, cosmology, and problems in general relativity. The department has close ties with the Canadian Institute for Theoretical Astrophysics (CITA) and the Dunlap Institute for Astronomy and Astrophysics (Dunlap). These ties provide great flexibility to students with a broad array of interests, giving them the option to work with a supervisor from one of these sibling units, and further enhance the opportunities for students to interact with leading researchers.

Faculty and students use the major optical, radio, and satellite observing facilities of the world. Of particular importance are the national facilities: the Canada France-Hawaii optical telescope, the James Clerk Maxwell radio telescope, and the Gemini telescopes located at the world's finest observing sites.

The department has an active experimental program using telescopes on long-duration stratospheric balloons and a complementary program designing and building instrumentation for large optical telescopes, and for cosmological and Galactic research.

There are approximately 100 faculty, postdoctoral fellows, graduate students, and staff in the Department of Astronomy and Astrophysics, CITA, and Dunlap. Students benefit from direct interactions with the broad range of external speakers invited to weekly seminar programs and colloquia.

Contact and Address

Web: www.astro.utoronto.ca
Email: grad.sec@astro.utoronto.ca
Telephone: (416) 946-5243
Fax: (416) 946-7287
Astronomy and Astrophysics: Astronomy and Astrophysics MSc

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Astronomy and Astrophysics' additional admission requirements stated below.
- Applicants must hold an appropriate bachelor's degree with high academic standing from a recognized university.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Because many universities do not offer extensive undergraduate training in astronomy and astrophysics, preparation in physics and mathematics is an acceptable background.

Program Requirements

- **Coursework.** Students must successfully complete **2.0 required full-course equivalents (FCEs): AST1501Y and AST1500Y**, with different supervisors. Students are immediately engaged in original research throughout these two required research courses. An oral exam by committee is held for each. AST1501Y is normally completed during the Fall/Winter of Year 1, and AST1500Y is completed in the following Summer session.
- Students must complete a minimum of **1.5 FCEs (three half courses)** from the AST preparatory, elective, or specialized courses. More courses may be taken for credit or audited as appropriate.
- Students are expected to attend the weekly general colloquium conducted by the department.
- **Residence.** Students are normally expected to be on campus full-time for the duration of the program.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Astronomy and Astrophysics: Astronomy and Astrophysics PhD

Doctor of Philosophy

Program Description

The Department of Astronomy and Astrophysics offers dynamic and competitive doctoral programs which emphasize research.

Students may be accepted into the PhD program via one of two routes: 1) following completion of an appropriate master's degree or 2) direct entry following completion of a bachelor's degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Astronomy and Astrophysics' additional admission requirements stated below.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Applicants may be accepted into the PhD program following completion of an MSc degree in Astronomy and Astrophysics from the University of Toronto, or an MSc degree in another appropriate discipline or from elsewhere deemed equivalent, with an average of at least B+ or demonstrated comparable research competence.

Program Requirements

- There is no minimum course requirement in the four-year program except for courses deemed necessary by the student's PhD supervisory or qualifying examination committees.
- Students register in the **AST4000Y Research course series** (in sequence of the last digit: 2, 3, etc.) beginning in the Summer session of Year 1 and continue through the sequence through Year 4. The first registration, AST4002Y, corresponds to the qualifying examinations. The series continues with registration each Fall/Winter, starting with AST4003Y and is incremented by one digit each subsequent academic year. This registration is tied to thesis research progress, which is assessed based on the two required annual PhD supervisory committee meetings in October and April.
- Students must successfully complete the two parts of the PhD qualifying examinations: literature-based and thesis proposal. Both are oral examinations conducted by a panel of faculty members.
The literature-based section evaluates the student's mastery of general astronomy and astrophysics and ability to apply that knowledge to understand relevant research literature.

The thesis proposal section evaluates the feasibility and value of the proposed thesis and verifies that the student has sufficient preparation in the relevant research area. It is based in part on a written summary of the proposed thesis provided by the student to the examiners. The literature qualifying examinations are taken in parallel with the corresponding graduate course offering, with completion of the four sections by the end of Year 1. The thesis proposal examination is taken in the Summer session of Year 1. Students who fail at the first attempt have the opportunity to retake the examinations once, by the deadline of January 31 of Year 2.

- A thesis embodying the results of original research, which must be submitted for appraisal in accordance with the regulations of the School of Graduate Studies.
- Students are expected to attend the weekly general colloquium conducted by the department.
- Residence. Students are normally expected to be on campus full-time for the duration of the program.

Program Requirements

- Coursework. Students must successfully complete 2.0 full-course equivalents (FCEs): AST1500Y and AST1501Y, with different supervisors. Students are immediately engaged in original research throughout these two required research courses. AST1501Y is normally completed during the Fall/Winter of Year 1, and AST1500Y is completed in the following Summer session. An oral exam by committee is held for each.
- Students must complete a minimum of 2.5 FCEs (five half courses) from the AST preparatory, elective, or specialized courses. Students may petition the associate chair, graduate to include courses offered by a cognate department at the equivalent level. (A maximum of 1.0 FCE may be substituted.) More courses may be taken for credit or audited as appropriate.
- Students register in the AST4000Y Research course series (in sequence of the last digit: 2, 3, etc.) beginning in the Summer session of Year 2 and continue the sequence through Year 5. The first registration, AST4002Y, corresponds to the qualifying examinations. The series continues with registration each Fall/Winter, starting with AST4003Y and is incremented by one digit each subsequent academic year. This registration is tied to thesis research progress, which is assessed based on the two required annual PhD supervisory committee meetings in October and April.
- Students must successfully complete the two parts of the PhD qualifying examinations: literature-based and thesis proposal. Both are oral examinations conducted by a panel of faculty members.
  - The literature-based section evaluates the student's mastery of general astronomy and astrophysics and ability to apply that knowledge to understand relevant research literature.
  - The thesis proposal section evaluates the feasibility and value of the proposed thesis and verifies that the student has sufficient preparation in the relevant research area. It is based in part on a written summary of the proposed thesis provided by the student to the examiners.

The literature qualifying examinations are taken in parallel with the corresponding graduate course offering, with completion of the four sections by the end of Year 2. The thesis proposal examination is taken in the Summer session of Year 2. Students who fail at the first attempt have the opportunity to retake the examinations once, by the deadline of January 31 of Year 3.

- A thesis embodying the results of original research, which must be submitted for appraisal in accordance with the regulations of the School of Graduate Studies.
- Students are expected to attend the weekly general colloquium conducted by the department.
- Residence. Students are normally expected to be on campus full-time for the duration of the program.
Astronomy and Astrophysics: Astronomy and Astrophysics MSc, PhD Courses

Preparatory Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AST1410H</td>
<td>Stars</td>
</tr>
<tr>
<td>AST1420H</td>
<td>Galactic Structure and Dynamics</td>
</tr>
<tr>
<td>AST1430H</td>
<td>Cosmology</td>
</tr>
<tr>
<td>AST1440H</td>
<td>Radiation Processes and Gas Dynamics</td>
</tr>
</tbody>
</table>

Research Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>AST1500Y+</td>
<td>Directed Research</td>
</tr>
<tr>
<td>AST1501Y</td>
<td>Introduction to Research</td>
</tr>
<tr>
<td>AST4000Y+</td>
<td>Research (students register in this 4000Y series each year, beginning in Year 2, in sequence of the last digit: 2, 3, etc.)</td>
</tr>
<tr>
<td>AST4002Y+</td>
<td>Research</td>
</tr>
<tr>
<td>AST4003Y+</td>
<td>Research</td>
</tr>
<tr>
<td>AST4004Y+</td>
<td>Research</td>
</tr>
<tr>
<td>AST4005Y+</td>
<td>Research</td>
</tr>
<tr>
<td>AST4006Y+</td>
<td>Research</td>
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</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Elective Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AST2010H</td>
<td>Physics of Stellar Atmospheres</td>
</tr>
<tr>
<td>AST2020H</td>
<td>Physics of Stellar Interiors</td>
</tr>
<tr>
<td>AST2030H</td>
<td>Interstellar Medium and Star Formation</td>
</tr>
<tr>
<td>AST2040H</td>
<td>Extragalactic Astronomy</td>
</tr>
<tr>
<td>AST2050H</td>
<td>Observational Techniques</td>
</tr>
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</table>

Specialized Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>AST3011H</td>
<td>Advanced Topics in Stellar and Galactic Astronomy II</td>
</tr>
<tr>
<td>AST3020H</td>
<td>Advanced Topics in Interstellar Matter and Star Formation I</td>
</tr>
<tr>
<td>AST3021H</td>
<td>Advanced Topics in Interstellar Matter and Star Formation II</td>
</tr>
<tr>
<td>AST3030H</td>
<td>Advanced Topics in Extragalactic Astronomy and Cosmology I</td>
</tr>
<tr>
<td></td>
<td>AST3031H Advanced Topics in Extragalactic Astronomy and Cosmology II</td>
</tr>
<tr>
<td></td>
<td>AST3050Y Theoretical Cosmology</td>
</tr>
<tr>
<td></td>
<td>AST3100H Lecture Series in Specialized Topics (mini courses)</td>
</tr>
<tr>
<td></td>
<td>AST3101H (0.25 FCE) Specialized Topics in Astronomy and Astrophysics</td>
</tr>
</tbody>
</table>
Biochemistry

Biochemistry: Introduction

Faculty Affiliation

Medicine

Degree Programs

Biochemistry

MSc and PhD

Combined Degree Programs

STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Biochemistry, MSc, PhD
- Developmental Biology
  - Biochemistry, MSc, PhD
- Genome Biology and Bioinformatics
  - Biochemistry, PhD
- Neuroscience
  - Biochemistry, MSc, PhD

Overview

Biochemistry is the study of the molecular events underlying biological processes. Consequently, it makes fundamental contributions to all disciplines concerned with living systems.

The Department of Biochemistry offers modern facilities for research in a wide variety of areas including the relationship between structure and biological function in proteins, nucleic acids, and lipids as well as complex multicomponent systems such as membranes and subcellular organelles.

Contact and Address

Web: biochemistry.utoronto.ca
Email: carrie.harber@utoronto.ca
Telephone: (416) 978-2702
Fax: (416) 946-8228

Biochemistry: Graduate Faculty

Full Members

Adeli, Khosrow - DipChem, MSc, PhD
Andrews, David - PhD
Attisano, Liliana - BSc, PhD (Interim Chair and Graduate Chair)
Baker, Robert - BSc, PhD
Bazzett-Jones, David - BSc, MSc, PhD
Bear, Christine - BSc, MSc, PhD
Brown, Grant - BSc, PhD
Callahan, John - BSc, MSc
Chakrabarty, Avijit - BSc, MSc, PhD
Chan, Hue Sun - BSc, MA, PhD
Davidson, Alan Richard - BSc, PhD
Deber, Charles - BSc, PhD
Ensminger, Alexander - BS, PhD
Ernst, Oliver - PhD
Fairn, Gregory - BSc, PhD
Forman-Kay, Julie - BSc, PhD
Glover, John - BSc, MSc, PhD
Grinstein, Sergio - BSc, PhD
Houri, Walid - BS, MS, PhD
Howell, Lynne - BSc, PhD
Ingles, C. James - BSc, PhD
Isenman, David - BSc, BSc, PhD
Jorgensen, Annelise - MSc, PhD
Kahr, Walter - MD
Kapus, Andras - MD, PhD
Kay, Lewis - PhD
Keeley, Frederick - BSc, PhD
Kelley, Shana - BA, PhD
Kim, Peter - PhD
Klip, Amira - ScD
Lee, Hyun - PhD
Lee, Warren - MD, PhD
Lewis, Peter - BSc, PhD
Lingwood, Clifford - BSc, PhD
Maclennan, David - BSc, MSc, PhD
Manolson, Morris - BS, PhD
Maynes, Jason T. - BSc, DrMed
McQuibban, Angus - BSc, MSc, PhD
Moraes, Trevor - BS, MSc, PhD
Moran, Laurence - BSc, PhD
Muise, Aleixo - MD
Nodwell, Justin - PhD (Chair and Graduate Chair)
Ohh, Michael - BSc, PhD
Pai, Emil - PhD
Palazzo, Alexander - PhD (Graduate Coordinator)
Parkinson, John - BS, PhD
Pomes, Regis - PhD
Prive, Gil - BSc, PhD
Rand, Margaret - BSc, PhD
Reithmeier, Reinhart - BSc, PhD
Rini, James - BSc, PhD
Robinson, Brian - BSc, PhD
Rotin, Daniela - BSc, MSc, PhD

Department of Biochemistry
University of Toronto
Room 5207, Medical Sciences Building
Toronto, Ontario M5S 1A8
Canada
Rubinstein, John - BSc, PhD, PhD
Segall, Jacqueline - BSc, PhD
Sharpe, Simon J. - BSc, PhD
Sicheri, Frank - BSc, PhD
Siu, Chi-Hung - BA, PhD
Smibert, Craig - BSc, PhD
Stagljar, Igor - BS, PhD
Steipe, Boris - MD, PhD
Trimbile, William - BSc, PhD
Williams, David - BSc, MSc, PhD
Yip, Christopher - BSc, PhD

Members Emeriti

Anwar, Rashid - BSc, MSc, PhD
Gurd, James - BA, PhD
Lane, Byron - BA, PhD
Marks, Alexander - MD, PhD
Murray, Robert - MS, MD, MB, PhD
Packham, Marian - PhD
Painter, Robert - BSc, PhD
Sarkar, Bibudhendra - BPhm, MPharm, PhD
Schachter, Harry - BA, MD, PhD
Williams, George - BSc, DSc, DSc, FRSC

Associate Members

Andreopoulos, Stavroula - BSc, MSc, PhD
Julien, Jean-Philippe - PhD
Patterson, Sian - PhD
Watts, Joel - PhD

Biochemistry: Biochemistry MSc

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Biochemistry’s additional admission requirements stated below.

- Normally, a minimum B+ average in the last two years of study in an honours or specialist BSc program in biochemistry or molecular biology. Applicants with strong academic credentials in honours or specialist programs in disciplines related to biochemistry or molecular biology are also considered.

- Applicants arrange for personal reference forms from three individuals familiar with their academic performance.

- Applicants who obtained a degree outside Canada or the United States are generally required to have an MSc degree in Biochemistry or in a closely related subject area.

- Applicants who obtained a degree outside Canada must arrange for general Graduate Record Examination (GRE) results to be sent to the department.

- Applicants whose primary language is not English and who graduated from a non-Canadian university where the language of instruction was not English must provide Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) scores:
  - paper-based TOEFL: minimum 580 score and 5 on the TWE
  - Internet-based TOEFL: minimum 93/120 score and 22/30 on the writing and speaking sections.

- In the absence of TOEFL results, an International English Language Testing System (IELTS) score of at least 7.0 is also acceptable.

Program Requirements

Students must complete any courses that were a condition of acceptance.

- **Coursework.** Students must successfully complete a total of 1.5 full-course equivalents (FCEs) as follows:
  - BCH2020Y Seminar Course in Biochemistry Level 1 (1.0 FCE)
  - BCH2101H Scientific Skills for Biochemists (0.25 FCE)

- Students must submit a **thesis** (RST9999Y; Credit/No Credit) and successfully complete an oral examination on their research and related aspects of biochemistry.

- Normally, MSc students are expected to participate as full-time students and to maintain full-time status in their laboratories until thesis completion and final defence.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)**

Time Limit

3 years full-time

 生物化学

**Course that may continue over a program. The course is graded when completed.**

** Students may begin the program in the Fall or Winter.

Biochemistry: Biochemistry PhD

Doctor of Philosophy

Students are accepted into the PhD program via one of three routes: 1) following completion of an MSc degree in biochemistry or a cognate discipline; 2) transfer (reclassification) from the University of Toronto MSc program; or 3) following completion of a BSc degree (direct entry) if, in the opinion of the Biochemistry Graduate Committee, the student has an outstanding academic record.
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Biochemistry's additional admission requirements stated below.
- Applicants must arrange for personal reference forms from three individuals familiar with their academic performance.
- Applicants are generally required to have an MSc degree in biochemistry or in a closely related subject area with high academic standing.
- Applicants who obtained a degree outside of Canada must arrange for General Record Examination (GRE) results to be sent to the department.
- Applicants whose primary language is not English and who graduated from a non-Canadian university where the language of instruction was not English must provide Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) scores:
  o paper-based TOEFL: minimum 580 score and 5 on the TWE
  o Internet-based TOEFL: minimum 93/120 score and 22/30 on the writing and speaking sections.
- In the absence of TOEFL results, an International English Language Testing System (IELTS) score of at least 7.0 is also acceptable.

Program Requirements

Students must complete any courses that were a condition of acceptance.

- Coursework. Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  o BCH2022Y0 Seminar Course in Biochemistry Level 2 (1.0 FCE)
  o BCH2101H Scientific Skills for Biochemists (0.25 FCE). If previously taken students must take a substitute 0.25 FCE course approved by the graduate coordinator.
  o 0.75 elective FCE.
- Students must successfully complete a qualifying examination within the first 24 months (ideally 18 months) of the program. To be eligible to write this qualifying examination, students must:
  o complete BCH2101H
  o be concurrently registered in BCH2022Y0
  o complete at least 0.25 elective FCE; after completing the qualifying examination, students must complete the remaining 0.5 elective FCE.
- Submit a thesis (RST9999Y; Credit/No Credit) and defend it at the Doctoral Final Oral Examination.
- Normally, PhD students are expected to participate as full-time students and to maintain full-time status in their laboratories until thesis completion and final defence.

Program Length

4 years full-time

Time Limit

6 years full-time

PhD Program (Transfer)

Transfer Requirements

- Transfer applicants must be enrolled in the MSc program in Biochemistry. Excellent students with high academic standing, who have clearly demonstrated the ability to do research at the doctoral level, may be considered for transfer to the PhD program. Recommendation by the student's supervisory committee is required.
- Transfer applicants must successfully complete a reclassification (transfer) examination within 18 to 24 months of starting the program.

Program Requirements

Students must complete any courses that were a condition of acceptance.

- Coursework. Students must successfully complete a total of 3.5 full-course equivalents (FCEs) as follows:
  o BCH2020Y0 Seminar Course in Biochemistry Level 1 (1.0 FCE)
  o BCH2022Y0 Seminar Course in Biochemistry Level 2 (1.0 FCE)
  o BCH2101H Scientific Skills for Biochemists (0.25 FCE)
  o 1.25 elective FCEs.
- To be eligible to write the reclassification examination, students must:
  o complete BCH2101H
  o be concurrently registered in BCH2022Y0
  o complete at least 0.25 elective FCE; after completing the reclassification examination, students must complete the remaining 1.0 elective FCE.
- Submit a thesis (RST9999Y; Credit/No Credit) and defend it at the Doctoral Final Oral Examination.
- Normally, PhD students are expected to participate as full-time students and to maintain full-time status in their laboratories until thesis completion and final defence.

Program Length

5 years full-time

Time Limit

7 years full-time

Course that may continue over a program. Credit is given when the course is completed.
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Direct entry is available to highly qualified BSc graduates who completed a Biochemistry specialist program or an appropriate undergraduate program in the life sciences from a recognized university, with a minimum A average in the final two years and relevant research experience.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Biochemistry's additional admission requirements stated below.
- Applicants must arrange for personal reference forms from three individuals familiar with their academic performance.
- Applicants who obtained a degree outside Canada or the United States are generally required to have an MSc degree in biochemistry or in a closely related subject area with high academic standing.
- Applicants who obtained a degree outside of Canada must arrange for General Record Examination (GRE) results to be sent to the department.
- Applicants whose primary language is not English and who graduated from a non-Canadian university where the language of instruction was not English must provide Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) scores:
  - paper-based TOEFL: minimum 580 score and 5 on the TWE
  - Internet-based TOEFL: minimum 93/120 score and 22/30 on the writing and speaking sections.
- In the absence of TOEFL results, an International English Language Testing System (IELTS) score of at least 7.0 is also acceptable.

Program Requirements

Students must complete any courses that were a condition of acceptance.

- **Coursework.** Students must successfully complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - BCH2020Y Seminar Course in Biochemistry Level 1 (1.0 FCE)
  - BCH2022Y Seminar Course in Biochemistry Level 2 (1.0 FCE)
  - BCH2101H Scientific Skills for Biochemists (0.25 FCE)
  - 1.25 elective FCEs.
- **Qualifying examination** within 18 to 24 months of the program. To be eligible to write this qualifying examination, students must:
  - complete BCH2101H
  - be concurrently registered in BCH2020Y
  - complete at least 0.25 elective FCE; after completing the qualifying exam, students must complete the remaining 1.0 elective FCE.
- **Submit a thesis** (RST9999Y; Credit/No Credit) and defend it at the Doctoral Final Oral Examination.
- Normally, PhD students are expected to participate as full-time students and to maintain full-time status in their laboratories until thesis completion and final defence.

Program Length

5 years

Time Limit

7 years

Course that may continue over a program. Credit is given when the course is completed.

Biochemistry: Biochemistry MSc, PhD Courses

For course details and availability, consult the Biochemistry website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCH2020Y</td>
<td>Seminar Course in Biochemistry Level 1 (Credit/No Credit)</td>
</tr>
<tr>
<td>BCH2022Y</td>
<td>Seminar Course in Biochemistry Level 2 (Credit/No Credit)</td>
</tr>
<tr>
<td>BCH2024H</td>
<td>Focused Topics in Biochemistry</td>
</tr>
<tr>
<td>JBB2025H</td>
<td>Protein Crystallography — Lectures</td>
</tr>
<tr>
<td>JBB2026H</td>
<td>Protein Structure, Folding, and Design</td>
</tr>
<tr>
<td>JBL1507H</td>
<td>Biochemistry of Inherited Disease</td>
</tr>
<tr>
<td>JNP1017H</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
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<tr>
<td>JNP1018H</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
</tr>
<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience: Cellular and Molecular — Lectures (PSL444Y)</td>
</tr>
</tbody>
</table>

Modular Courses

Each modular course is worth 0.25 full-course equivalent (FCE).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCH2101H</td>
<td>Scientific Skills for Biochemists</td>
</tr>
<tr>
<td>BCH2102H</td>
<td>Biomolecular Dynamics and Function</td>
</tr>
<tr>
<td>BCH2103H</td>
<td>Current Topics in Prion Biology</td>
</tr>
<tr>
<td>BCH2104H</td>
<td>The Biochemistry of Translational Medicine</td>
</tr>
<tr>
<td>BCH2105H</td>
<td>Cystic Fibrosis: The Cause, The Treatment</td>
</tr>
<tr>
<td>BCH2106H</td>
<td>Membrane Proteomics in Biomedical Research</td>
</tr>
<tr>
<td>BCH2107H</td>
<td>Introduction to Biomolecular Simulations</td>
</tr>
<tr>
<td>BCH2109H</td>
<td>Engineering Vaccines: Development to Deployment</td>
</tr>
<tr>
<td>BCH2110H</td>
<td>Eukaryotic Signaling</td>
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<td>Course Title</td>
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<tr>
<td>BCH2111H</td>
<td>Post-transcriptional Control of Gene Expression</td>
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<tr>
<td>BCH2112H</td>
<td>From Chaperones to CRISPR-Cas: the Incredible Genius of Phages</td>
</tr>
<tr>
<td>BCH2113H</td>
<td>Advances in Precision Medicine</td>
</tr>
<tr>
<td>BCH2114H</td>
<td>Frontiers in Drug Discovery</td>
</tr>
<tr>
<td>BCH2115H</td>
<td>Applying Modern Evolutionary Thinking to Biochemistry, Cell, and Molecular Biology</td>
</tr>
<tr>
<td>BCH2116H</td>
<td>Electron Paramagnetic Resonance Spectroscopy in Modern Life Sciences</td>
</tr>
<tr>
<td>BCH2119H</td>
<td>Advances in Epigenetics</td>
</tr>
<tr>
<td>BCH2120H</td>
<td>Studies of Tissue Barriers: Regulation of Phenotype and Transport Across the Epithelium and Endothelium</td>
</tr>
<tr>
<td>BCH2121H</td>
<td>Lipid Metabolism in Health and Disease: Mechanisms of Diabetic Dyslipidemia in Obesity and Type 2 Diabetes</td>
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<tr>
<td>BCH2122H</td>
<td>The Use of High Content Screening in Biomolecular Medicine</td>
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<tr>
<td>BCH2123H</td>
<td>Protein Structure Prediction and Homology Modelling</td>
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<tr>
<td>BCH2124H</td>
<td>Molecular Chaperones and Cellular Protein Homeostasis</td>
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<tr>
<td>BCH2125H</td>
<td>Structure and Dynamics of Biomacromolecules Using Solid State NMR Spectroscopy</td>
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<tr>
<td>BCH2126H</td>
<td>Subcellular Social Networks: Inter-Organelle Contact Sites</td>
</tr>
<tr>
<td>BCH2127H</td>
<td>Advances in Optical Microscopy: From Single Molecules to Four-Dimensional Imaging</td>
</tr>
<tr>
<td>BCH2128H</td>
<td>Scientific Thinking and Practice</td>
</tr>
<tr>
<td>BCH2129H</td>
<td>Genome Instability: Basic Science to Human Disease</td>
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<tr>
<td>BCH2130H</td>
<td>Cancer Biology</td>
</tr>
<tr>
<td>BCH2131H</td>
<td>Genomics of Infectious Disease</td>
</tr>
<tr>
<td>BCH2132H</td>
<td>Modelling Human Diseases from Cells to Organoids</td>
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<tr>
<td>BCH2133H</td>
<td>Tyrosine Kinase Signaling</td>
</tr>
<tr>
<td>BCH2134H</td>
<td>Cytoskeletal Dynamics</td>
</tr>
<tr>
<td>BCH2135H</td>
<td>Mitochondria and Metabolism in Human Health and Disease</td>
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<tr>
<td>BCH2136H</td>
<td>Biological Condensates</td>
</tr>
<tr>
<td>BCH2137H</td>
<td>Bug v. Host</td>
</tr>
<tr>
<td>BCH2138H</td>
<td>Advanced Electron Microscopy</td>
</tr>
<tr>
<td>BCH2139H</td>
<td>Islet Biology I: Gene to Cell to Organ to Disease</td>
</tr>
<tr>
<td>BCH2140H</td>
<td>Islet Biology II: Beyond Glucose Control: Molecular Targets, Diagnostics and Cutting-Edge Technologies</td>
</tr>
<tr>
<td>BCH2141H</td>
<td>Advanced Methods in Biomolecular Interactions</td>
</tr>
<tr>
<td>BCH2200H</td>
<td>Design Thinking for Scientists</td>
</tr>
<tr>
<td>BCH2201H</td>
<td>Professional Development</td>
</tr>
<tr>
<td>BCH2202H</td>
<td>Intro Programming in R</td>
</tr>
<tr>
<td>BCH2203H</td>
<td>Intro Programming in Python</td>
</tr>
<tr>
<td>BCH2204H</td>
<td>Advanced Programming in R</td>
</tr>
<tr>
<td>BCH2205H</td>
<td>Advanced Programming in Python</td>
</tr>
<tr>
<td>BCH2206H</td>
<td>Interdisciplinary Science</td>
</tr>
<tr>
<td>BCH2207H</td>
<td>Collaborative Science: Student Centered Interdisciplinary Studies</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

§ Arts and Science undergraduate course.
Biomedical Engineering

Biomedical Engineering: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Biomedical Engineering

MASc

- Fields:
  - Biomaterials, Tissue Engineering and Regenerative Medicine;
  - Engineering in a Clinical Setting;
  - Nanotechnology, Molecular Imaging and Systems Biology;
  - Neural/Sensory Systems and Rehabilitation

MEng

- Fields:
  - Biomaterials, Tissue Engineering and Regenerative Medicine;
  - Engineering in a Clinical Setting;
  - Nanotechnology, Molecular Imaging and Systems Biology;
  - Neural/Sensory Systems and Rehabilitation

- Emphases:
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology (ELITE);
  - Forensic Engineering

PhD

- Fields:
  - Biomaterials, Tissue Engineering and Regenerative Medicine;
  - Clinical Engineering;
  - Engineering in a Clinical Setting;
  - Nanotechnology, Molecular Imaging and Systems Biology;
  - Neural/Sensory Systems and Rehabilitation

Clinical Engineering

MHSc

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Cardiovascular Sciences
  - Biomedical Engineering, MASc, PhD
  - Clinical Engineering, MHSc
- Developmental Biology
  - Biomedical Engineering, MASc, PhD
  - Clinical Engineering, MHSc
- Genome Biology and Bioinformatics
  - Biomedical Engineering, PhD
- Musculoskeletal Sciences
  - Biomedical Engineering, MASc, PhD
- Neuroscience
  - Biomedical Engineering, MASc, PhD
  - Clinical Engineering, MHSc
- Resuscitation Sciences (admissions have been administratively suspended)
  - Biomedical Engineering, PhD
  - Clinical Engineering, MHSc

Overview

The Institute of Biomedical Engineering (IBME) offers facilities for research in biomedical engineering and for three educational programs leading to master's and doctoral degrees.

Biomedical engineering is a multidisciplinary field that integrates engineering and biology/medicine. It uses methods, principles, and tools of engineering, physical sciences, and mathematics to solve problems in the medical and life sciences for the study of living systems; the enhancement and replacement of those systems; the design and construction of systems to measure basic physiological parameters; the development of instruments, materials, and techniques for biological and medical practice; and the development of artificial organs and other medical devices. By its nature, the majority of the institute's work is interdisciplinary.

Contact and Address

Institute of Biomedical Engineering Academic Programs Office

Web: bme.utoronto.ca
Email: contact.bme@utoronto.ca

Institute of Biomedical Engineering
University of Toronto
Room 407, Rosebrugh Building
164 College Street
Toronto, Ontario M5S 3G9
Canada

MASc, MHSc, and PhD Programs

Telephone: (416) 978-4841
Fax: (416) 978-4317

MEng Program

Telephone: (416) 978-6102
Fax: (416) 978-4317
Biomedical Engineering: Graduate Faculty

Full Members

Andrysek, Jan - BSc, MASc, PhD
Audet, Julie - MASc, PhD
Baradkjian, Berj - BSc, BEd, MASc, PhD
Biddiss, Elaine Alisa - MASc, PhD
Borschel, Gregory - BSc, DrMed
Carlen, Peter - MD
Chan, Warren - BSc, PhD (Director)
Chau, Tom - PhD
Cheng, Hai-Ling - BSc, MS, PhD
Chou, Leo - PhD
Davies, John - BSc, BDSc, PhD, DSc (Associate Director, Graduate Program)
Davies, John - BSc, MASc, PhD
Drake, James McKenzie - BSE, MSc, MBChB
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Fernie, Geoffrey - BSc, PhD
Finer, Yoav - MSc, MS, DMD, PhD
Garton, Michael James - PhD
Gilbert, Penney - PhD
Grynaps, Marc - MSc, PhD
Gu, Frank - BSc, PhD
Hynynen, Kullervo - BSc, MS, PhD
Ibrahim, George - BS, MD, PhD
Kandel, Rita - MD
Keating, Armand - BSc, MD
Kelley, Shana - BA, PhD
Kumacheva, Eugenia - MSc, PhD
Kushki, Azadeh - DrEng
Laflamme, Michael - BS, MD, PhD
Levi, Ofir - BSc, MSc, PhD
Matsuura, Naomi - ME, PhD
McGuigan, Alison - MEng, PhD
Mihailidis, Alex - BSc, MASc, PhD
Naguib, Hani - BSc, ME, PhD, PEng
Popovic, Milos - Diploma, PhD
Prescott, Steven - BSc, MSc, MD, PhD
Rodisic, Milica - BEng, PhD
Rocheleau, Jonathan - BSc, PhD
Santerre, Paul - BSc, MSc, PhD
Schemitsch, Emil - MD
Sefton, Michael - BASc, ScD
Shoichet, Molly - PhD
Simmons, Craig - BSc, MSc, PhD
Sone, Eli - BSc, MS, PhD
Sun, Yu - BS, MS, MS, PhD
Taati, Babak - PhD
Truong, Kevin - BASc, PhD
Weersink, Robert - BSc, PhD
Wheeler, Aaron - BS, PhD
Whyne, Cari - BSc, PhD
Wong, Willy - BSc, MS, PhD
Yadollahi, Azadeh - DrEng
Yasufuku, Kazuhiro - DrMed, PhD
Yee, Albert - MSc, LMCC, MD
Yip, Christopher - BSc, PhD
Yoo, Paul - BASc, MSc, PhD
You, Lidan - BS, MS, PhD
Zandstra, Peter - BEng, PhD
Zilman, Anton - BSc, MSc, PhD

Associate Members

Aviv, Richard - MBChB
Beal, Deryk - BA, MHSc, PhD
Bouwmeester, Chris - PhD
Coolens, Catherine - BS, MB, PhD
Ganss, Bernhard - BSc, MSc, DrRerNat
Guerguerian, Anne Marie - MD
Haider, Masoom - BM, MD
Khan, Shehroz Saeed - PhD
Kilkenny Rocheleau, Dawn - PhD
Lankarany, Milad - PhD
Steinman, David - BASc, MASc, PhD
Triverio, Piero - BScEE, MS, PhD
Valiante, Tauif - BSc, MD, PhD

Biomedical Engineering: Biomedical Engineering MASc

Master of Applied Science

Program Description

The MASc program is a research-stream, thesis-based program which provides a strong academic foundation for students who want to become immersed in the discipline of biomedical engineering. This program is designed to offer students challenging and rewarding research opportunities within the context of using engineering principles to enhance the quality of our health-care system.

The MASc program is offered in the fields of 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the institute’s additional admission requirements stated below.

• A bachelor’s degree in dentistry, engineering, medicine, or one of the physical or biological sciences from a recognized university with a minimum academic standing of mid-B or 3.0 grade point average (GPA) in the final two years of study or over senior-level courses.

Program Requirements

• Coursework. The program normally comprises at least 2.0 full-course equivalents (FCEs) including:

Members Emeriti

Cobbold, Richard - PhD

Dolan, Alf - BSc, MSc
Frecker, Richard - BSc, MD, PhD
Kunov, Hans - MSc, PhD
Norwich, Kenneth - MSc, PhD
Pilliar, Robert - BASc, PhD

Biomedical Engineering: Biomedical Engineering MASc
Two of the following (1.0 FCE):
- BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE)
- BME1478H Coding for Biomedical Engineers (0.5 FCE)
- BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE)

Two half-course electives relevant to the student's area of research (1.0 FCE).

Students must participate in:
- Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE).
- JDE1000H Ethics in Research (0.0 FCE).
- Health and safety training workshops.

Successful completion of a research thesis in at least one of the biomedical engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Biomedical Engineering: Biomedical Engineering MEng

Master of Engineering

Program Description

The MEng program is an accelerated, professional program with a focus on the design and commercialization of biomedical devices. Students will have the opportunity to take on applied design challenges and meet the growing demands of this industry through a four-month practical experience through internships, research projects, or practical course activities.

The MEng program is offered in the fields of 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.

The MEng program can be taken on a full-time, extended full-time, or part-time basis.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IBME’s additional admission requirements stated below.
- A four-year bachelor's degree in engineering, medicine, dentistry, or one of the physical or biological sciences from a recognized university, with at least a mid-B average (3.0 grade point average [GPA]) in the final two years of study or over senior-level courses.

Program Requirements

- Coursework. Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - At least 2.0 FCEs in biomedical engineering courses; these include all BME and joint BME course offerings.
  - At least 1.0 FCE in commercialization and entrepreneurship courses such as BME1800H, BME1801H, BME1802H, and BME1405H.
  - A 1.0 FCE Practical Experience in Applied Research course in biomedical device development, usually over one session for a full-time placement (BME1899Y) or over three sessions for a part-time placement (BME1898Y). The placement must be in at least one of the following biomedical engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; or 4) Neural/Sensory Systems and Rehabilitation. The practical experience course can be taken in academic research and teaching laboratories, government institutions, health-care facilities, in the industry, or in health-care consulting firms.
  - The remaining 1.0 FCE can be two half courses in either biomedical engineering, commercialization and entrepreneurship, or any graduate-level course the student is interested in.

- All courses must be at the graduate level, which includes both 500- and 1000-level. Students can take a maximum of one 500-level course.
- Health and safety training workshops.
- Students have the option of completing an emphasis in Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); or Forensic Engineering as part of their degree program. Please see details in the Biomedical Engineering MEng Emphases section.

Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

2 years
Extended Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IBME’s additional admission requirements stated below.
- A four-year bachelor's degree in engineering, medicine, dentistry, or one of the physical or biological sciences from a recognized university, with at least a mid-B average (3.0 grade point average [GPA]) in the final two years of study or over senior-level courses.

Program Requirements

- **Coursework.** Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - At least 2.0 FCEs in biomedical engineering courses; these include all BME and joint BME course offerings.
  - At least 1.0 FCE in commercialization and entrepreneurship courses such as BME1800H, BME1801H, BME1802H, and BME1405H.
  - A 1.0 FCE **Practical Experience in Applied Research** course in biomedical device development, usually over one session for a full-time placement (BME1899Y) or over three sessions for a part-time placement (BME1898Y). The placement must be in at least one of the following biomedical engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; or 4) Neural/Sensory Systems and Rehabilitation. The practical experience course can be taken in academic research and teaching laboratories, government institutions, health-care facilities, in the industry, or in health-care consulting firms.
  - The remaining 1.0 FCE can be two half courses in either biomedical engineering, commercialization and entrepreneurship, or any graduate-level course the student is interested in.

- All courses must be at the graduate level, which includes both 500- and 1000-level. Students can take a maximum of one 500-level course.

- Health and safety training workshops.

- Students have the option of completing an emphasis in Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); or Forensic Engineering as part of their degree program. Please see details in the Biomedical Engineering MEng Emphases section.

Program Length

6 sessions (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IBME’s additional admission requirements stated below.
- A four-year bachelor's degree in engineering, medicine, dentistry, or one of the physical or biological sciences from a recognized university, with at least a mid-B average (3.0 grade point average [GPA]) in the final two years of study or over senior-level courses.

Program Requirements

- **Coursework.** Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - At least 2.0 FCEs in biomedical engineering courses; these include all BME and joint BME course offerings.
  - At least 1.0 FCE in commercialization and entrepreneurship courses such as BME1800H, BME1801H, BME1802H, and BME1405H.
  - A 1.0 FCE **Practical Experience in Applied Research** course in biomedical device development, usually over one session for a full-time placement (BME1899Y) or over three sessions for a part-time placement (BME1898Y). The placement must be in at least one of the following biomedical engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; or 4) Neural/Sensory Systems and Rehabilitation. The practical experience course can be taken in academic research and teaching laboratories, government institutions, health-care facilities, in the industry, or in health-care consulting firms.
  - The remaining 1.0 FCE can be two half courses in either biomedical engineering, commercialization and entrepreneurship, or any graduate-level course the student is interested in.

- All courses must be at the graduate level, which includes both 500- and 1000-level. Students can take a maximum of one 500-level course.

- Health and safety training workshops.

- Students have the option of completing an emphasis in Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); or Forensic Engineering as part of their degree program. Please see details in the Biomedical Engineering MEng Emphases section.

Program Length

9 sessions part-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

Time Limit

6 years
Biomedical Engineering: Biomedical Engineering PhD; Fields: 1 Biomaterials, Tissue Engineering & Regenerative Medicine; 2 Engineering in a Clinical Setting; 3 Nanotechnology, Molecular Imaging & Systems Biology; 4 Neural/Sensory Systems & Rehabilitation

Doctor of Philosophy

Program Description

The PhD program offers courses and a strong research thesis component. Students emerge from this program ready to pursue careers in academia, medicine, industry, and government. Students with a particular interest in conducting biomedical engineering research with a primary clinical focus may pursue a field in clinical engineering within the Biomedical Engineering PhD program.

Applicants may enter the PhD program via one of three routes: 1) following completion of an appropriate master’s degree; 2) transfer from the University of Toronto MASc or MHSc program; or 3) direct entry following completion of an appropriate bachelor’s degree.

Program Requirements

- **Coursework.** Normally, students must complete at least 1.0 full-course equivalent (FCE) including:
  - Two of the following (1.0 FCE):
    - BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    - BME1478H Coding for Biomedical Engineers (0.5 FCE);
    - BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE).
  
- Students are also expected to pursue a thesis topic relevant to at least one of the following Biomedical Engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.

- Within 12 months of registration, students must pass a qualifying examination covering the broad field of biomedical engineering appropriate to their background.

- Successful completion of a thesis, representing an original investigation in biomedical engineering.

- Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the departmental oral examination is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the Doctoral Final Oral Examination.

- Students must participate in:
  - Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE);  
  - JDE1000H Ethics in Research (0.0 FCE); 
  - Health and safety training workshops.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the institute’s additional admission requirements stated below.

- Applicants must have a master’s degree in dentistry, engineering, medicine, or one of the physical or biological sciences with an overall average of at least B+ (3.3 grade point average [GPA]) from a recognized university.

Program Length

- 4 years

Time Limit

- 6 years

PhD Program (Transfer)

Transfer Requirements

- Highly qualified master’s students (MHSc students in Clinical Engineering or MASc students in any field) may be considered for transfer into the PhD program in any of the five fields. MASc and MHsc students who transfer to a PhD must fulfill the admission requirements listed under the specific field of the PhD program they are transferring to.
Program Requirements for MASc Transfer Students

- **Coursework.** Students who transfer from the MASc program in Biomedical Engineering must complete the total course requirements for both degrees: 4.0 FCEs at the master's level plus 1.0 FCE at the PhD level, for a total of **5.0 FCEs**.
  - Students must complete two of the following (1.0 FCE):
    - BME1477H *Biomedical Engineering Project Design and Execution* (0.5 FCE);
    - BME1478H *Coding for Biomedical Engineers* (0.5 FCE);
    - BME1479H *Statistical Discovery Techniques for Biomedical Researchers* (0.5 FCE).
  - Elective courses relevant to the student's area of research (2.0 FCEs).

Program Requirements for MHSc Transfer Students

- **Coursework.** Students who transfer from the MHSc program in Biomedical Engineering must complete the total course requirements for both degrees: 2.0 FCE equivalents (FCEs) at the master's level plus 1.0 FCE at the PhD level, for a total of **3.0 FCEs**.
  - Students must complete two of the following (1.0 FCE):
    - BME1477H *Biomedical Engineering Project Design and Execution* (0.5 FCE);
    - BME1478H *Coding for Biomedical Engineers* (0.5 FCE); or
    - BME1479H *Statistical Discovery Techniques for Biomedical Researchers* (0.5 FCE).
  - Elective courses relevant to the student's area of research (2.0 FCEs).

All PhD Students

- Students are expected to pursue a **thesis topic** relevant to at least one of the following Biomedical Engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.
- Within 12 months of registration, students must pass a **qualifying examination** covering the broad field of biomedical engineering appropriate to their background.
- Successful completion of a **thesis**, representing an original investigation in biomedical engineering.
- Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the **departmental oral examination** is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the **Doctoral Final Oral Examination**.
- Students must participate in:
  - Either BME1010H or BME1011H *Graduate Seminar* series (0.0 FCE);
  - JDE1000H *Ethics in Research* (0.0 FCE);
  - Health and safety training workshops.

Program Length

- **5 years**

Time Limit

- **7 years**

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the institute’s additional admission requirements stated below.
- Direct entry with a bachelor’s degree may be considered in exceptional cases. Applicants must have an undergraduate degree in dentistry, engineering, medicine, or one of the physical or biological sciences.

Program Requirements

- **Coursework.** Normally, students must complete **3.0 full-course equivalents (FCEs)** including:
  - Two of the following (1.0 FCE):
    - BME1477H *Biomedical Engineering Project Design and Execution* (0.5 FCE);
    - BME1478H *Coding for Biomedical Engineers* (0.5 FCE); or
    - BME1479H *Statistical Discovery Techniques for Biomedical Researchers* (0.5 FCE).
  - Elective courses relevant to the student's area of research (2.0 FCEs).
- Students are also expected to pursue a **thesis topic** relevant to at least one of the following Biomedical Engineering research fields: 1) Biomaterials, Tissue Engineering and Regenerative Medicine; 2) Engineering in a Clinical Setting; 3) Nanotechnology, Molecular Imaging and Systems Biology; and 4) Neural/Sensory Systems and Rehabilitation.
- Successful completion of a **thesis**, representing an original investigation in biomedical engineering.
- Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the **departmental oral examination** is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the **Doctoral Final Oral Examination**.
- Students must participate in:
  - Either BME1010H or BME1011H *Graduate Seminar* series (0.0 FCE);
Biomedical Engineering: Biomedical Engineering PhD; Field: Clinical Engineering

Program Description

The PhD program offers courses and a strong research thesis component. Students emerge from this program ready to pursue careers in academia, medicine, industry, and government. Students with a particular interest in conducting biomedical engineering research with a primary clinical focus may pursue a field in clinical engineering within the Biomedical Engineering PhD program.

Program Requirements

- **Coursework.** Normally, students must complete at least 1.0 full-course equivalent (FCE) including:
  - Two of the following (1.0 FCE):
    - BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    - BME1478H Coding for Biomedical Engineers (0.5 FCE);
    - BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE)
  - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the BME clinical engineering courses (BME1405H, BME1436H, BME1439H, or BME4444Y) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.

- Students must (1) conduct their research in a clinical environment and (2) be co-supervised by both engineering and health science faculty. The primary supervisor must be BME-appointed; however, the co-supervisor could be from a clinical unit other than BME but must be appointed to SGS.

- Within 12 months of registration, students must pass a **qualifying examination** covering the broad field of biomedical engineering appropriate to their background.

- Successful completion of a **thesis**, representing an original investigation in biomedical engineering.

- Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the **departmental oral examination** is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the **Doctoral Final Oral Examination**.

- Students must participate in:
  - Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE);
  - JDE1000H Ethics in Research (0.0 FCE);
  - Health and safety training workshops.

PhD Program (Transfer)

**Transfer Requirements**

- Highly qualified master’s students (MHSc students in Clinical Engineering or MASc students in any field) may be considered for transfer into the PhD program in any of the five research fields. To be eligible to transfer to the PhD, Clinical Engineering MHSc students must complete 3.0 full-course equivalents (FCEs) within the MHSc curriculum.

- MHSc students who transfer to the PhD in the field of Clinical Engineering must fulfill the PhD program requirements listed below. MHSc students who transfer to the other PhD fields must fulfill the program requirements of the PhD field as described in the applicable section.
Program Requirements for MASc Transfer Students

- **Coursework.** Students who transfer from the MASc program in Biomedical Engineering must complete the total course requirements for both degrees: 2.0 full-course equivalents (FCEs) at the master’s level plus 1.0 FCE at the PhD level, for a **total of 3.0 FCEs**.
  - Students must complete two of the following (1.0 FCE):
    - BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    - BME1478H Coding for Biomedical Engineers (0.5 FCE); or
    - BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE).
  - Elective courses relevant to the student's area of research (2.0 FCEs).
  - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the BME clinical engineering courses (BME1405H, BME1436H, BME1439H, or BME4444Y) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.

Program Requirements for MHSc Transfer Students

- **Coursework.** Students who transfer from the MHSc program in Biomedical Engineering must complete the total course requirements for both degrees: 4.0 FCEs at the master’s level plus 1.0 FCE at the PhD level, for a **total of 5.0 FCEs**.
  - BME1405H Clinical Engineering Instrumentation I (0.5 FCE) and BME1436H Clinical Engineering Surgery (0.5 FCE).
  - Students must complete two of the following (1.0 FCE):
    - BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    - BME1478H Coding for Biomedical Engineers (0.5 FCE); or
    - BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE).
  - Two half-course electives relevant to the student's area of research (1.0 FCE).
  - BME4444Y Practical Experience Course (1.0 FCE) in health-care facilities, the medical device industry, or health-care consulting firms. The practical experience course must total a minimum of 625 hours.
  - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the BME clinical engineering courses (BME1405H, BME1436H, BME1439H, or BME4444Y) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.

All PhD Students

- Students must (1) conduct their research in a clinical environment and (2) be co-supervised by both engineering and health science faculty. The primary supervisor must be BME-appointed; however, the co-supervisor could be from a clinical unit other than BME but must be appointed to SGS.
- Within 12 months of registration, students must pass a **qualifying examination** covering the broad field of biomedical engineering appropriate to their background.
- Successful completion of a **thesis**, representing an original investigation in biomedical engineering.
- Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the **departmental oral examination** is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the **Doctoral Final Oral Examination**.
- Students must participate in:
  - Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE);
  - JDE1000H Ethics in Research (0.0 FCE); or
  - Health and safety training workshops.

Program Length
5 years

Time Limit
7 years

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the institute's additional admission requirements stated below.
- Direct entry with a bachelor's degree may be considered in exceptional cases. Applicants must have an undergraduate degree in dentistry, engineering, medicine, or one of the physical or biological sciences.

**Program Requirements**

- **Coursework.** Normally, students must complete **3.0 full-course equivalents (FCEs)** including:
  - Two of the following (1.0 FCE):
    - BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    - BME1478H Coding for Biomedical Engineers (0.5 FCE); or
    - BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE).
  - Elective courses relevant to the student's area of research (2.0 FCEs).
  - If a student does not have a formal degree in clinical engineering, 0.5 FCE from one of the BME clinical engineering courses (BME1405H, BME1436H, BME1439H, or BME4444Y) is required. A student who possesses protracted professional engineering experience (five or more years) will be exempt from this requirement.
• Students in the Clinical Engineering field must (1) conduct their research in a clinical environment and (2) be co-supervised by both engineering and health science faculty. The primary supervisor must be BME-appointed; however, the co-supervisor could be from a clinical unit other than BME but must be appointed to SGS.

• Within 12 months of registration, students must pass a qualifying examination covering the broad field of biomedical engineering appropriate to their background.

• Successful completion of a thesis, representing an original investigation in biomedical engineering.

• Students will continue to meet with their supervisory committee at least once every 12 months until recommendation for the departmental oral examination is made. On the recommendation of the supervisory committee and special approval from their department Graduate Chair or Coordinator, candidates have the opportunity to waive the departmental oral examination and proceed directly to the Doctoral Final Oral Examination.

• Students must participate in:
  o Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE);
  o JDE1000H Ethics in Research (0.0 FCE);
  o Health and safety training workshops.

Program Requirements

• Coursework. Students must normally complete 4.0 full-course equivalents (FCEs) as follows:
  o BME1405H Clinical Engineering Instrumentation I (0.5 FCE) and BME1436H Clinical Engineering Surgery (0.5 FCE)
  o Two of the following (1.0 FCE):
    ▪ BME1477H Biomedical Engineering Project Design and Execution (0.5 FCE);
    ▪ BME1478H Coding for Biomedical Engineers (0.5 FCE); or
    ▪ BME1479H Statistical Discovery Techniques for Biomedical Researchers (0.5 FCE)
  o Two half-course electives relevant to the student’s area of research (1.0 FCE).
  o BME4444Y Practical Experience Course (1.0 FCE) in health-care facilities, the medical device industry, or health-care consulting firms. The practical experience course must total a minimum of 625 hours.

• Students must participate in:
  o Either BME1010H or BME1011H Graduate Seminar series (0.0 FCE) and
  o JDE1000H Ethics in Research (0.0 FCE).

• Successful completion of a thesis.

Program Length

5 years

Time Limit

7 years

Biomedical Engineering: Clinical Engineering MHSc

Master of Health Science

Program Description

The MHSc program educates students on how to apply and implement medical technologies to optimize modern health-care delivery. This professional degree program consists of academic courses and a research thesis and provides students with real-world exposure through a practical experience course with a private sector company, a hospital, or a research facility.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the institute’s additional admission requirements stated below.
• Selected students with a four-year bachelor's degree in engineering, medicine, dentistry, or one of the physical or biological sciences from a recognized university, with a mid-B (3.0 grade point average [GPA]) or higher in the final two years of study or over senior-level courses.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Biomedical Engineering: Biomedical Engineering MEng Emphases

Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.
Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

**Leadership**


**Entrepreneurship and Innovation**


**Finance and Management**


**Engineering and Society**

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

**Core Course**

MSE1031H *Forensic Engineering*.

**Elective Courses**


Biomedical Engineering: Biomedical Engineering MASc, MEng, PhD, Clinical Engineering MHSc Courses

Not all courses are offered every year. Students should contact the BME office for information about course availability. Outlines of these and other closely related courses may be obtained from the BME office.

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<thead>
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<th>Course Code</th>
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<td>Graduate Seminar</td>
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<td>BME1011H</td>
<td>Graduate Seminar</td>
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<td>BME1405H</td>
<td>Clinical Engineering Instrumentation I</td>
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<td>BME1459H</td>
<td>Protein Engineering</td>
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<tr>
<td>BME1460H</td>
<td>Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging</td>
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<td>BME1471H</td>
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<td>BME1472H</td>
<td>Fundamentals of Neuromodulation Technology and Clinical Applications</td>
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<td>BME1473H</td>
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<tr>
<td>BME1477H</td>
<td>Biomedical Engineering Project Design and Execution</td>
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<td>Statistical Discovery Techniques for Biomedical Researchers</td>
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<td>BME1500H</td>
<td>Topics in Neuromodulation</td>
</tr>
<tr>
<td>BME1480H</td>
<td>Experimental Design and Multivariate Analysis in Bioengineering</td>
</tr>
<tr>
<td>BME1800H</td>
<td>Biomedical Product Development I</td>
</tr>
<tr>
<td>BME1801H</td>
<td>Biomedical Product Development II</td>
</tr>
<tr>
<td>BME1802H</td>
<td>Biomedical Devices — Human Factors</td>
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<tr>
<td>BME1898Y</td>
<td>Practical Experience in Applied Research PT</td>
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<tr>
<td>BME1899Y</td>
<td>Practical Experience in Applied Research FT</td>
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<tr>
<td>BME4444Y</td>
<td>Practical Experience Course</td>
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<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
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<tr>
<td>CHE1334H</td>
<td>Organ-on-a-Chip Engineering</td>
</tr>
<tr>
<td>JCB1349H</td>
<td>Molecular Assemblies: Structure/Function/Properties</td>
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<tr>
<td>JEB1365H</td>
<td>Ultrasound: Theory and Applications in Biology and Medicine</td>
</tr>
<tr>
<td>JEB1433H</td>
<td>Medical Imaging</td>
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<tr>
<td>JEB1444H</td>
<td>Neural Engineering</td>
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<tr>
<td>JEB1447H</td>
<td>Sensory Communications</td>
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<tr>
<td>JMB1050H</td>
<td>Biological and Bio-inspired Materials</td>
</tr>
<tr>
<td>BME/JPB1022H</td>
<td>Human Physiology as Related to Engineering II</td>
</tr>
<tr>
<td>JPB1071H</td>
<td>Advanced Topics: Computational Neuroscience</td>
</tr>
<tr>
<td>JTC1331H</td>
<td>Biomaterials Science</td>
</tr>
</tbody>
</table>
Cell and Systems Biology

Cell and Systems Biology: Introduction

Faculty Affiliation
Arts and Science

Degree Programs

Cell and Systems Biology

MSc and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Developmental Biology
  - Cell and Systems Biology, MSc, PhD
- Genome Biology and Bioinformatics
  - Cell and Systems Biology, PhD
- Neuroscience
  - Cell and Systems Biology, MSc, PhD

Overview

Students undertaking graduate programs in the Department of Cell and Systems Biology pursue research related to fundamental mechanisms in the growth, development, and behaviour of organisms ranging from unicellular microbes to more complex organisms in the plant and animal kingdoms. Research projects extend from the molecular level to that of whole organisms interacting with each other and their environment.

Students enjoy state-of-the-art facilities and make use of cutting-edge approaches including functional genomics, genetics, metabolomics, proteomics, bioinformatics, computational biology, cell biology, developmental biology, molecular biology, and physiology.

Contact and Address

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Email: grad.csb@utoronto.ca
Telephone: (416) 978-3477
Fax: (416) 978-8532

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University of Toronto
Ramsay Wright Building
Room 424, 25 Harbord Street
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Canada

Cell and Systems Biology: Graduate Faculty

Full Members

AbouHaidar, Mounir - DipdESup, BSc, PhD, CAP
Arruda Carvalho, Malthe - BSc, MSc, PhD
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Braeutigam, Katharina - MA, MA, PhD
Bruce, Ashley - BA, PhD
Buck, Leslie - BSc, PhD
Calarco, John Anthony - PhD, CRC
Campbell, Malcolm - DPhil
Chang, Belinda - AB, PhD, CRC
Cheng, Mary - MSc, PhD
Christendat, Dinesh - PhD
Corbit, Laura - PhD
Currie, Mark Allister - BSc, PhD
Desveaux, Darrell - BSc, MSc, PhD
Edwards, Elizabeth - BEng, PhD
Ensminger, Ingo - PhD
Erb, Suzanne - BSc, MA, PhD
Ercik, Teddy - BSc, PhD
Espie, George - Ph.D
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Filion, Guillaume - BA, MA
Gazzarrini, Sonia - BA, PhD
Gerlai, Robert - MSc, PhD
Gilbert, Penney - PhD
Godt, Dorothea - MS, DrRenNat
Gonzales-Vigil, Eliana - BS, PhD
Goring, Daphne - PhD
Guttmann, David - BS, PhD
Guzzo, Christina - BSc, PhD
Harris, Tony - BSc, PhD
Harrison, Rene - BS, MS, PhD
Hasenkampf, Clare - BSc, MS, PhD
Holmes, Melissa - BA, MA, PhD
Ito Lee, Rutsuko - BA, PhD
Kanelis, Voula - PhD
Kim, Junchul - BSc, MSc, PhD
Koyama, Minoru - BA, MSc, PhD
Lange, Angela - BSc, PhD
Levine, Joel - BA, PhD
Liu, Baohua - BSc, MSc, PhD
Lovejoy, David - PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
Mason, Andrew - MS, PhD
Master, Emma - BSc, PhD
McCourt, Peter - PhD
McFarlane, Heather - DSc
McGowan, Patrick - BSc, MA, PhD
McMillen, David - BSc, MS, PhD
Mitchell, Jennifer - DSc
Monks, Ashley - BSc, MA, PhD
Moses, Alan - BA, PhD
Mott, Adam - BSc, PhD
Nambara, Eiji - MS, PhD
Nash, Joanne - BS, MSc, PhD
Ness, Robert - BSc, PhD
Nguyen Ba, Alex - BSc, PhD
Orchard, Ian - BSc, PhD, DSc
Peever, John - MSc, PhD
Phillips, Michael - BSc, PhD
Plotnikov, Sergey - DSc
Porteus, Cosima Sandra - BSc, MSc, PhD
Provart, Nicholas - PhD *(Chair and Graduate Chair)*
Reid, Stephen - BS, PhD
Resulaj, Arbora - BASc, PhD
Rhee, Ho-Sung - BS, MS, PhD
Riggs, Dan - BS, PhD
Ringueette, Maurice - BSc, PhD
Senatore, Adriano - BSc, MSc, PhD
Sokolowski, Marla - BSc, PhD, CRC
Stephenson, Richard - BSc, PhD
Stewart, Bryan - BSc, MS, DPhil
Takahara, Kaori - BSc, MSc, PhD
Tepass, Ulrich - MSc, PhD, CRC, FRSC
Terebiznik, Mauricio - BSc, PhD
Thiele, Tod - BS, PhD
Treanor, Bebhinn Lucy - BSc, PhD
Troppepe, Vince - BSc, PhD
Vanlerberghhe, Greg - BSc, MSc, PhD
Welch Jr., Ken - BS, MA, PhD
Westwood, Tim - PhD
Winklbauer, Rudolf - MSc, PhD
Woodin, Melanie - MSc, PhD
Yoshioka, Keiko - PhD
Zhao, Rongmin - BSc, PhD
Zhen, Mei - PhD

Members Emeriti

Coleman, John - BSc, PhD
Varmuza, Susannah - BSc, MSc, PhD

Associate Members

Fittipaldi, Nahuel Vicente - BS, MS, PhD
Pressey, Jessica - PhD
Saltzman, Arneet - BSc, PhD
Subramaniam, Rajagopal - PhD
Walters, Brandon - BA, MS, PhD
Wang, Pauline - DSc

Cell and Systems Biology: Cell and Systems Biology MSc

Master of Science

Program Description

The MSc program in Cell and Systems Biology provides ideal training for career paths in education, business, and policy where science-based decision-making and the interpretation and transmission of scientific information are becoming increasingly important, particularly in many of the "knowledge-based" economies that are emerging the world over.

The MSc program trains scientists who are well suited to fill this demand. The program’s objective is to provide students with skills in the generation, critical evaluation, assessment, and communication of data so that they are equipped to proceed with further post-graduate degrees, or other career opportunities where such skills are desired.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Cell and Systems Biology's additional admission requirements stated below.
- An appropriate bachelor's degree with high academic standing from a recognized university, with a B+ (or equivalent) average in the final year of the bachelor's program, and a mid-B overall average in the previous year of study.

Program Requirements

- Complete 0.5 full-course equivalent (FCE) of approved graduate coursework.
- Complete the CSB1010Y MSc Seminar Series (1.0 FCE, minimum 24 seminars per year).
- Complete a thesis based on a research project.
- Give a public presentation of thesis research and defend the thesis at an oral examination.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

Cell and Systems Biology: Cell and Systems Biology PhD

Doctor of Philosophy

Program Description

The PhD program in Cell and Systems Biology trains scientists who will form part of the next generation of independent researchers in cell, molecular, and systems biology. Graduates will be the future high-level teachers, frontier expanders, and decision-makers in these fields of inquiry.

PhD graduates are expected to emerge from the program as independent and autonomous scientists, producing a written thesis that describes original research that stands as a testimony to their ability to generate publishable, stand-alone contributions to the peer-reviewed scientific literature. As part of their training, PhD students acquire skills in the communication of scientific research (including teaching skills), and acquire broad-based knowledge of the theory and practice underpinning their chosen field.

Applicants may enter the PhD program via one of three routes:
1) following completion of an MSc degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of an honours bachelor's degree.
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Cell and Systems Biology's additional admission requirements stated below.
- Students will be admitted only when they have made arrangements to secure a research supervisor by contacting professors in the department.
- Applicants may be accepted who already hold an MSc degree from a recognized university, with a grade average equivalent to at least a University of Toronto A– during the MSc.

Program Requirements

- Students must successfully complete:
  - 1.0 full-course equivalent (FCE) of approved graduate coursework.
  - CSB1011Y PhD Seminar Series (1.0 FCE, minimum 24 seminars per year).
  - A PhD proposal, which involves three components:
    - preparation of a written research proposal
    - presentation to the department and questioning by the public
    - in-camera questioning by a PhD proposal examination committee immediately following the public presentation.
  - Their proposal examination between 13 and 20 months after the start date of enrolment in their graduate program.
- Students must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.

Program Length

4 years

Time Limit

6 years

PhD Program (Transfer)

Transfer Requirements

- Applicants may be accepted first into the University of Toronto MSc program and, conditional upon approval by the thesis supervisory committee, may transfer into the PhD program.

Program Requirements

Students must:

- Be in good academic standing at the end of Year 1.
- Successfully complete 1.0 full-course equivalent (FCE) of approved graduate coursework. Those who transfer into the PhD program from the MSc may apply 0.5 graduate FCE towards the PhD course requirements.
- Successfully complete CSB1011Y PhD Seminar Series (1.0 FCE, minimum 24 seminars per year).
- Successfully complete a PhD transfer examination between 13 and 20 months after the start date of enrolment in their graduate program. The transfer examination involves three components:
  - preparation of a written research proposal
  - presentation to the department and questioning by the public
  - in-camera questioning by a PhD proposal examination committee immediately following the public presentation.
- Deliver two public seminars in the department based on their thesis research.
- Submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.

Program Length

5 years

Time Limit

7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Cell and Systems Biology's additional admission requirements stated below.
- Applicants will be admitted only when they have made arrangements to secure a research supervisor by contacting professors in the department.
- Exceptional applicants with a BSc degree may be accepted by direct entry into the PhD program, with a grade point average equivalent to a University of Toronto A– or better in the final year of the BSc. Direct-entry PhD candidates should also display evidence of research potential.

Program Requirements

Students must:

- Be in good academic standing at the end of Year 1.
- Successfully complete 1.0 full-course equivalent (FCE) of approved graduate coursework.
• Successfully complete CSB1011Y *PhD Seminar Series* (1.0 FCE, minimum 24 seminars per year).
• Complete additional courses if their undergraduate preparation does not include the study of subjects deemed to be necessary for research in the chosen area. The courses will be chosen in consultation with the supervisory committee.
• Successfully complete a **PhD proposal**, which involves three components:
  o preparation of a written research proposal
  o presentation to the department and questioning by the public
  o *in-camera* questioning by a PhD proposal examination committee immediately following the public presentation.
• Students must successfully complete their **proposal examination** between 13 and 20 months after the start date of enrolment in their graduate program.
• Deliver **two public seminars** in the department based on their thesis research.
• Submit a **thesis** and defend it at a *Doctoral Final Oral Examination* conducted by the School of Graduate Studies.

**Program Length**

5 years

**Time Limit**

7 years

### Cell and Systems Biology: Cell and Systems Biology MSc, PhD Courses

Consult the graduate unit regarding course availability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSB1010Y</td>
<td>MSc Seminar Series</td>
</tr>
<tr>
<td>CSB1011Y</td>
<td>PhD Seminar Series</td>
</tr>
<tr>
<td>CSB1018H</td>
<td>Advanced Microscopy and Imaging</td>
</tr>
<tr>
<td>CSB1020H</td>
<td>Topics in Cell and Systems Biology</td>
</tr>
<tr>
<td>CSB1025H</td>
<td>Methods in Genomics and Proteomics</td>
</tr>
<tr>
<td>CSB1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>CSB1482H</td>
<td>Readings in Genome Biology and Bioinformatics</td>
</tr>
</tbody>
</table>

© Course that continues over a program. The course is graded when completed.
Chemical Engineering and Applied Chemistry: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Chemical Engineering and Applied Chemistry

MASc

• Emphasis:
  o Sustainable Energy

MEng

• Emphases:
  o Advanced Manufacturing;
  o Advanced Soft Materials;
  o Advanced Water Technologies;
  o Analytics;
  o Biomanufacturing;
  o Engineering and Globalization;
  o Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  o Forensic Engineering;
  o Sustainable Energy

PhD

• Emphasis:
  o Sustainable Energy

Combined Degree Programs

• UTSC, Environmental Biology (Specialist), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
• UTSC, Environmental Biology (Specialist Co-op), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
• UTSC, Environmental Chemistry (Specialist), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
• UTSC, Environmental Chemistry (Specialist Co-op), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
• UTSC, Environmental Physics (Specialist), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
• UTSC, Environmental Physics (Specialist Co-op), Honours BSc / Chemical Engineering and Applied Chemistry, MEng

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Biomedical Engineering
  o Chemical Engineering and Applied Chemistry, MASc, PhD
• Cardiovascular Sciences
  o Chemical Engineering and Applied Chemistry, MASc, PhD
• Engineering Education
  o Chemical Engineering and Applied Chemistry, MASc, PhD
• Environmental Studies
  o Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
• Environment and Health
  o Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
• Genome Biology and Bioinformatics
  o Chemical Engineering and Applied Chemistry, PhD
• Global Health (U of T Global Scholar)
  o Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
• Next-Generation Precision Medicine
  o Chemical Engineering and Applied Chemistry, PhD

Overview

The Department of Chemical Engineering and Applied Chemistry offers graduate research in pure science, engineering fundamentals, and engineering applications. The department attracts a dynamic professorial staff with outstanding international reputations. Many graduate students work closely with industrial partners during their studies. Research is funded by the government and industry, often by means of a consortium of companies. The experience of dealing with real-world problems prepares graduates for successful professional careers.

Research and teaching are the foundations of the department. Research is clustered into eight major categories:

• Biomolecular and Biomedical Engineering
• Bioprocess Engineering
• Chemical and Materials Process Engineering
• Engineering Informatics
• Environmental Science and Engineering
• Pulp and Paper
• Surface and Interface Engineering
• Sustainable Energy
Contact and Address

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Admissions email: admissgrad.chemeng@utoronto.ca
General email: gradassist.chemeng@utoronto.ca
Telephone: (416) 946-3987
Fax: (416) 978-8605

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University of Toronto
Room 216a, Wallberg Building
200 College Street
Toronto, Ontario M5S 3E5
Canada

Chemical Engineering and Applied Chemistry: Graduate Faculty

Full Members

Acosta, Edgar Joel - BS, MS, PhD
Allen, Christine - BSc, PhD, PhD
Allen, Grant - BASc, MASc, PhD
Audet, Julie - MASc, PhD
Azimi, Gisele - BASc, MASc, PhD
Bender, Timothy - PhD
Bobicki, Erin - BASc, PhD
Chan, Arthur - BS, MSc, PhD
Chan, Warren - BSc, PhD
Cheng, Yu-Ling - SB, PhD
Chin, Cathy Ya Huei - BSc, MSc, PhD
Chow, Chung-Wai - MD, PhD
Cluett, William - BSc, PhD
Coyle, Tom - BS, BA, ScD
Diamond, Miriam - MSc, MSc, PhD
Diosady, Levente - BASc, MASc, PhD
Edwards, Aled - BSc, PhD
Edwards, Elizabeth - BEng, PhD
Evans, Greg - PhD
Farnood, Ramin - BASc, MASc, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gu, Frank - BSc, PhD
Howe, Jane - PhD
Jia, Charles - BEng, MEng, PhD
Kawaiji, Masahiro - BASc, MSc, PhD
Kirk, Donald - BASc, MASc, PhD
Kortschot, Mark - BASc, MASc, PhD
Kraatz, Heinz-Bernhard - BA, MC, PhD
Kumacheva, Eugenia - MSc, PhD
Lawryshyn, Yuri - DiplIng, BASc, MASc, MBA, PhD
Lawson, Christopher - PhD
MacLean, Heather L. - BASc, MASc, MBA, PhD, PEng
Mahadevan, Radhakrishnan - BTech, PhD (Associate Chair and Graduate Coordinator)
Master, Emma - BSc, PhD
McGuigan, Alison - MEng, PhD
Mims, Charles - PhD
Moore, Emily - BASc, DPhil
Naguib, Hani - BSc, ME, PhD, PEng
Newman, Roger Charles - BA, PhD, DSc
Papangelakis, Vladimiro - MEng, PhD
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Ramchandran, Arun - PhD
Reeve, Douglas - BSc, MASc, PhD
Sain, Mohini - PhD
Santerre, Paul - BSc, MSc, PhD
Savchenko, Alexei - MS, PhD
Saville, Bradley - BSc, PhD
Seferos, Dwight - BCh, DChem
Sefton, Michael - BASc, ScD
Shoichet, Molly - PhD
Thomson, Murray - BSc, PhD
Thorpe, Steven - BASc, MASc, PhD
Wania, Frank - MPH, PhD
Werber, Jay - MPH, PhD
Winnik, Mitchell - BA, PhD
Yan, Ning - BSc, PhD, PEng
Yip, Christopher - BSc, PhD
Zandstra, Peter - BEng, PhD

Members Emeriti

Balke, Stephen - BEng, PhD
Boocock, David - BSc, PhD
Chaffey, Charles - BSc, PhD
Charles, Michael - BSc, MSc, PhD, FCIC
Foulkes, Frank - BASc, MASc, PhD
James, David - BSc, MS, MA, PhD
Luus, Rein - BASc, MASc, AM, PhD
Mackay, Donald - BSc, PhD
Paradi, Joseph - BSc, PhD
Phillips, Mary - BASc, BASc, MA, PhD
Trass, Olev - BSE, ScD

Associate Members

Beller, Harry - BA, MS, PhD
Crooks, Gregory - BASc, MEng
Farmer, Jennifer - BSc, PhD
Galatro, Daniela - MSc
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Gong, Sunling - BASc, MASc, PhD
Jones, Andrew Kevin - BSE, MASc, PhD
Krause, Eberhard - MASc, PhD
Norval, Graeme - BASc, MASc, PhD
Rizvi, Syed - BS, MEng, MS, PhD
Shah, Sirish - MSc, PhD
Sinukoff, Randall - BASc, MASc
Tabe, Shahram - BASc, MASc, PhD
Tran, Helen - PhD
Wealthall, Gary - PhD
Wolfaardt, Gideon - BSc, MSc, PhD
Chemical Engineering and Applied Chemistry: Chemical Engineering and Applied Chemistry MASc

Master of Applied Science

Program Description

The MASc program is ideal for students who aspire to a rewarding career in research, whether in academia or industry. It is a stepping stone to a doctoral (PhD) degree.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry's additional admission requirements stated below.
- A four-year degree (or equivalent) in engineering or the physical/chemical/biological sciences with a B+ average (or equivalent) in each of the last two years of full-time study.

Program Requirements

- Each student should discuss possible research projects with several members of the department before selecting a research area and a supervisor. Students must complete a thesis on a research topic.
- Coursework. Students must successfully complete a total of 1.5 full-course equivalents [FCEs] (three graduate half courses) as follows:
  - One of these courses must be CHE1102H Research Methods and Project Execution (0.5 FCE), typically completed in Year 1.
  - At least one course must be selected in an area outside the student's area of research.
  - Only one 500-level course may be taken for credit towards the degree program.
- All Year 1 and Year 2 students must complete CHE3001H Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry (Credit/No Credit) in both the Fall and Winter sessions.
- Students must also complete CHE2222H Safety Workshop and JDE1000H Ethics in Research.
- The program requires a minimum full-time residence of two sessions (eight months). This means students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

"Course that may continue over a program. The course is graded when completed.

Chemical Engineering and Applied Chemistry: Chemical Engineering and Applied Chemistry MEng

Master of Engineering

Program Description

The MEng program is designed for engineers who wish to enhance their career opportunities in as little as one year of full-time study. Students undergo advanced professional training that is respected by employers and differentiates them in a crowded marketplace. The MEng program differs from the MASc and PhD programs in that it is oriented to learning through prescribed courses rather than through research.

The MEng program can be taken on a full-time, extended full-time, or part-time basis. The part-time option is intended primarily for engineers in full-time professional practice.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry's additional admission requirements stated below.
- A Bachelor of Engineering (BEng) or Bachelor of Applied Science (BASc) degree in engineering with at least a mid-B (or equivalent) in each of the last two years of full-time study.

Program Requirements

- The MEng program normally requires completion of:
  - a total of 5.0 full-course equivalents (FCEs) or
  - 3.5 FCEs plus a 1.5-FCE project supervised by a faculty member. At the discretion of the supervisor, a second reviewer and/or oral defence may be requested for students who plan to enter the doctoral program.
- Students normally complete the requirements in three sessions (one year).
• Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry's additional admission requirements stated below.
- A Bachelor of Engineering (BEng) or Bachelor of Applied Science (BASc) degree in engineering with at least a mid-B (or equivalent) in each of the last two years of full-time study.

Program Requirements

- The MEng program normally requires completion of:
  - a total of 5.0 full-course equivalents (FCEs) or
  - 3.5 FCEs plus a 1.5-FCE project supervised by a faculty member. At the discretion of the supervisor, a second reviewer and/or oral defence may be requested for students who plan to enter the doctoral program.
- Students are expected to complete the requirements in six sessions (two years). They are limited to six half courses per year and three half courses per session.
- Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

9 sessions

Time Limit

6 years

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry's additional admission requirements stated below.
- A Bachelor of Engineering (BEng) or Bachelor of Applied Science (BASc) degree in engineering with at least a mid-B (or equivalent) in each of the last two years of full-time study.

Program Requirements

- The MEng program normally requires completion of:
  - a total of 5.0 full-course equivalents (FCEs) or
  - 3.5 FCEs plus a 1.5-FCE project supervised by a faculty member. At the discretion of the supervisor, a second reviewer and/or oral defence may be requested for students who plan to enter the doctoral program.
- Students normally complete the requirements in nine sessions (three years). They are limited to four half courses per year and two half courses per session.
- Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

9 sessions

Time Limit

6 years

** Students may begin the program at different times.
Chemical Engineering and Applied Chemistry: Chemical Engineering and Applied Chemistry PhD

Doctor of Philosophy

Program Description

The PhD program is designed for students who wish to become an expert in a specific research area and is a stepping stone to a career in academia. Students work alongside world-renowned researchers while gaining profound depth and experience in their field of study.

Applicants may enter the program via one of three routes: 1) following completion of an MASc degree; 2) transfer from the University of Toronto MASc program after completing one year; or 3) direct entry following completion of a bachelor's degree, in exceptional cases. The program can also be taken on a flexible-time basis.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry's additional admission requirements stated below.
- B+ (or equivalent) in each of the last two years of full-time study in the undergraduate program, and successful completion of a research master's degree with an overall average of at least B+ (or equivalent).
- Applicants may enter the PhD program following completion of an MASc program with a minimum B+ average and exceptional all-around scientific and intellectual ability as evidenced from theoretical or experimental research, academic standing, initiative, and publication record.

Program Requirements

- **Coursework.** Students must successfully complete at least 2.0 full-course equivalents (FCEs) (four graduate half courses).
  - One course must be CHE1102H Research Methods and Project Execution (0.5 FCE) taken once during the program, typically in Year 1.
  - Courses must be selected from the calendar and approved by the student's supervisor and the Graduate Coordinator. At least one of these courses must be taken in a secondary area of study. It is recommended that one of these courses should be selected from Category A: fundamental courses.
  - Normally, PhD students are not allowed to take a 500-level course for credit towards the degree program.
- All Year 1, Year 2, Year 3, and Year 4 students must complete CHE3001H Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry (Credit/No Credit) in both the Fall and Winter sessions.
- If not already completed, students must take CHE2222H Safety Workshop and JDE1000H Ethics in Research.
- **Thesis** on a research topic.
- Within 9 to 12 months of starting the PhD program, students must pass a qualifying examination.
- Students normally remain in residence (full-time, on campus) until the departmental recommendation for the Doctoral Final Oral Examination is made, unless special permission to do so has otherwise been granted by the departmental Graduate Studies Committee.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

4 years

Time Limit

6 years

PhD Program (Transfer)

Transfer Requirements

- B+ (or equivalent) in each of the last two years of full-time study in the undergraduate program.
- Applicants may enter the PhD program by transferring from the University of Toronto MASc program after completing one year; such students must successfully complete a bypass examination.
- International applicants with a master's degree from outside Canada or the United States may be asked to register in the MASc program and follow the transfer route of entry.

Program Requirements

- **Coursework.** Students must successfully complete at least 3.0 full-course equivalents (FCEs) (six graduate half courses) and do not have to take a separate PhD qualifying examination.
  - One course must be CHE1102H Research Methods and Project Execution (0.5 FCE) taken once during the program, typically in Year 1.
  - Courses must be selected from the calendar and approved by the student's supervisor and the Graduate Coordinator. At least one of these courses must be taken in a secondary area of study. It is recommended that one of these courses should be selected from Category A: fundamental courses.
  - Normally, PhD students are not allowed to take a 500-level course for credit towards the degree program.
- All Year 1, Year 2, Year 3, and Year 4 students must complete CHE3001H Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry.
Chemical Engineering and Applied Chemistry (Credit/No Credit) in both the Fall and Winter sessions.

- If not already completed, students must take CHE2222H Safety Workshop and JDE1000H Ethics in Research.
- Thesis on a research topic.
- Students normally remain in residence (full-time, on campus) until the departmental recommendation for the Doctoral Final Oral Examination is made, unless special permission to do so has otherwise been granted by the departmental Graduate Studies Committee.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

5 years

Time Limit

7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry’s additional admission requirements stated below.
- Minimum A– average in each of the final two years of study in the undergraduate program, and participation in a research project (either through an undergraduate thesis or through research conducted in a lab).

Program Requirements

- Coursework. Students must successfully complete at least 3.0 full-course equivalents (FCEs) (six graduate half courses).
  - One course must be CHE1102H Research Methods and Project Execution (0.5 FCE) taken once during the program, typically in Year 1.
  - Courses must be selected from the calendar and approved by the student’s supervisor and the Graduate Coordinator. At least one of these courses must be taken in a secondary area of study. It is recommended that one of these courses should be selected from Category A: fundamental courses.
  - Normally, PhD students are not allowed to take a 500-level course for credit towards the degree program.
- All Year 1, Year 2, Year 3, and Year 4 students must complete CHE3001H Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry (Credit/No Credit) in both the Fall and Winter sessions.
- If not already completed, students must take CHE2222H Safety Workshop and JDE1000H Ethics in Research.

- Within 9 to 12 months of starting the PhD program, students must pass a qualifying examination.
- Thesis on a research topic.
- Students normally remain in residence (full-time, on campus) until the departmental recommendation for the Doctoral Final Oral Examination is made, unless special permission to do so has otherwise been granted by the departmental Graduate Studies Committee.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

5 years

Time Limit

7 years

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemical Engineering and Applied Chemistry’s additional admission requirements stated below.
- B+ (or equivalent) in each of the last two years of full-time study in the undergraduate program, and successful completion of a research master’s degree with an overall average of at least B+ (or equivalent).
- Applicants may enter the PhD following completion of an MASc program with a minimum B+ average and exceptional all-around scientific and intellectual ability as evidenced from theoretical or experimental research, academic standing, initiative, and publication record.
- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option. However, applicants to the flexible-time PhD option must also demonstrate that they are actively engaged in professional activities related to their proposed program of study.

Program Requirements

- Students in the flexible-time option will be subject to the same requirements as students in the full-time option.
- Coursework. Students must successfully complete at least 2.0 full-course equivalents (FCEs) (four graduate half courses).
  - One course must be CHE1102H Research Methods and Project Execution (0.5 FCE) taken once during the program, typically in Year 1.
Courses must be selected from the calendar and approved by the student's supervisor and the Graduate Coordinator. At least one of these courses must be taken in a secondary area of study. It is recommended that one of these courses should be selected from Category A: fundamental courses.

Normally, PhD students are not allowed to take a 500-level course for credit towards the degree program.

- All Year 1, Year 2, Year 3, and Year 4 students must complete CHE301H Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry (Credit/No Credit) in both the Fall and Winter sessions.
- If not already completed, students must take CHE2222H Safety Workshop and JDE1000H Ethics in Research.
- Within 16 months of starting the PhD program, students must pass a qualifying examination.
- Thesis on a research topic.
- Students normally remain in residence (full-time, on campus) until the departmental recommendation for the Doctoral Final Oral Examination is made, unless special permission to do so has otherwise been granted by the departmental Graduate Studies Committee.
- Students in the PhD program have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases section.

Program Length

6 years

Time Limit

8 years

Chemical Engineering and Applied Chemistry: Chemical Engineering and Applied Chemistry MASc, MEng, PhD Emphases

Emphasis: Advanced Manufacturing (MEng only)

MEng students must successfully complete:

- Four half courses (2.0 full-course equivalents [FCEs]), including at least one core course.
- Elective courses may include other core courses, and courses from either of two streams: Manufacturing Engineering and Manufacturing Management.

Core Courses

AER501H Advanced Mechanics of Structures
AER1403H Advanced Aerospace Structures
APS1028H Operations and Production Management for Manufacturing and Services

CHE1123H Liquid Biofuels
MIE519H Advanced Manufacturing Technologies
MIE1740H Smart Materials and Structures.

Elective Courses — Manufacturing Engineering

AER521H, AER 1415H,
CHE575H, CHE1134H, CHE1475H,
MIE505H, MIE540H, MIE1706H, MIE1713H, MIE1718H, MIE1743H,
MSE1013H, MSE1015H, MSE1028H, MSE1031H, MSE1058H,
MSE1061H, ROB501H.

Elective Courses — Manufacturing Management

APS1005H, APS1012H, APS1013H, APS1017H, APS1020H,
APS1023H, APS1040H, APS1088H, APS1420H,
CHE561H, CHE1434H,
MIE523H, MIE1022H, MIE1505H, MIE1514H, MIE1715H,
MIE1721H, MIE1723H, MIE1727H,
TEP1011H, TEP1026H, TEP1501H.

Emphasis: Advanced Soft Materials (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:

CHE562H, CHE1310H, CHE1333H, CHE1335H, CHE1475H,
JTC1134H, JTC1135H,
MIE1705H, MIE1706H, MIE1707H, MIE1740H,
MSE1032H.

Students may double-count one course at most towards any CHE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete a total of 2.0 full-course equivalents (FCEs) (four half courses). This includes at least one course (0.5 FCE) selected from the core course list. The remaining courses must be selected from the elective course list.

- Core courses (complete at least one):
  - CHE1150H Industrial Water Technology
  - CIV1308H Physical and Chemical Treatment Processes
  - CIV1309H Biological Treatment Processes
  - CIV1311H Advanced and Sustainable Drinking Water Treatment
- Elective courses (complete remaining courses):
  - CHE565H Aqueous Process Engineering
  - CHE1213H Corrosion
  - CHE1430H Hydrometallurgy Theory and Practice
  - CIV514H Environmental Biotechnology
  - CIV549H Groundwater Flow and Contamination
Elective Courses


Enrolment Contact

Enrolment in the emphasis is permitted at any time during the MEng program. After students are admitted to the normal MEng program, students may contact Prof. Ron Hofmann, (416) 946-7508.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, students will receive a transcript notation from the Faculty Graduate Studies office (subject to Prof. Hofmann’s recommendation).

Emphasis: Analytics (MEng only)

To be admitted to the emphasis in Analytics, MEng students must first successfully complete a prerequisite course APS1070H (0.5 full-course equivalent [FCE]).

Subsequently, to earn the emphasis, students must successfully complete four additional half courses (2.0 FCEs) from the list of core courses or elective courses. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Students must have completed the prerequisite course APS1070H before taking any of the core courses.

Prerequisite Course

APS1070H Foundations of Data Analytics and Machine Learning.

Core Courses

CHE1147H Data Mining in Engineering
ECE1513H Introduction to Machine Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1504H)
MIE1624H Introduction to Data Science and Analytics
MSE1065H Application of Artificial Intelligence in Materials Design (exclusion: MSE1063H).

Emphasis: Biomanufacturing (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:


Students may double-count one course at most towards any CHE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.

Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)'s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.

Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcript should contact the Faculty Graduate Studies office.
Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

Leadership

TEP1010H, TEP1011H, TEP1026H, TEP1027H, TEP1029H, TEP1030H, TEP1051H, TEP1052H.

Entrepreneurship and Innovation


Finance and Management


Engineering and Society

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE1031H Forensic Engineering.

Elective Courses


Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from either of the following lists below.
- A thesis towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- Four half courses (2.0 FCEs) from either of the following lists below, including at least one core course (0.5 FCE).

Core Courses

APS1032H Introduction to Energy Project Management
MIE515H Alternative Energy Systems
MIE1120H Current Energy Infrastructure and Resources.

Elective Courses


Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.

Chemical Engineering and Applied Chemistry: Chemical Engineering and Applied Chemistry MASc, MEng, PhD Courses

An updated course list and schedule is available on the departmental website at the beginning of each session listing the time and room location for each course. Not all courses are given every year.

All students wishing to undertake research and teaching in the Department of Chemical Engineering and Applied Chemistry must successfully complete an intensive occupational health and safety training workshop, CHE2222H Safety Workshop, which normally takes place during the week immediately preceding the commencement of graduate courses in the Fall. In each
subsequent year of registration, students must take the Workplace Hazardous Materials Information System refresher workshop. Students registered in a graduate degree program involving research are required to participate in the non-credit seminar course JDE1000H *Ethics in Research* during their first or second session of registration.

**Category A: Fundamental Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE1100H</td>
<td>Fundamentals of Chemical Engineering</td>
</tr>
<tr>
<td>CHE1107H</td>
<td>Applied Mathematics</td>
</tr>
<tr>
<td>CHE1141H</td>
<td>Advanced Chemical Reaction Engineering</td>
</tr>
<tr>
<td>CHE1142H</td>
<td>Applied Chemical Thermodynamics</td>
</tr>
<tr>
<td>CHE1143H</td>
<td>Transport Phenomena</td>
</tr>
<tr>
<td>CHE1310H</td>
<td>Chemical Properties of Polymers</td>
</tr>
<tr>
<td>JTC1134H</td>
<td>Applied Surface and Interface Science</td>
</tr>
<tr>
<td>JTC1135H</td>
<td>Applied Surface Chemistry</td>
</tr>
</tbody>
</table>

**Category B: Specialized Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS1028H</td>
<td>Operations and Production Management for Manufacturing and Services</td>
</tr>
<tr>
<td>APS1031H</td>
<td>Infrastructure Planning</td>
</tr>
<tr>
<td>APS1032H</td>
<td>Introduction to Energy Project Management</td>
</tr>
<tr>
<td>APS1033H</td>
<td>Business Innovation Leading to the Future, Based on Imagineering</td>
</tr>
<tr>
<td>APS1034H</td>
<td>Making Sense of Accidents</td>
</tr>
<tr>
<td>APS1035H</td>
<td>Technology Sales for Entrepreneurs</td>
</tr>
<tr>
<td>APS1036H</td>
<td>Formative Experiential Entrepreneurial Learning (FEEL)</td>
</tr>
<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
</tr>
<tr>
<td>APS1070H</td>
<td>Foundations of Data Analytics and Machine Learning</td>
</tr>
<tr>
<td>APS1088H</td>
<td>Entrepreneurship and Business for Engineers</td>
</tr>
<tr>
<td>APS1201H</td>
<td>Topics in Engineering and Public Policy 500-Level (undergraduate/graduate) Courses</td>
</tr>
<tr>
<td>APS1420H</td>
<td>Technology, Engineering, and Global Development</td>
</tr>
<tr>
<td>APS5500H</td>
<td>Research Methods and Project Execution for Graduate Student Success (exclusion: CHE1102H)</td>
</tr>
<tr>
<td>CHE507H</td>
<td>Process Modelling and Simulation</td>
</tr>
<tr>
<td>CHE553H</td>
<td>Electrochemistry</td>
</tr>
<tr>
<td>CHE561H</td>
<td>Risk Based Safety Management</td>
</tr>
<tr>
<td>CHE564H</td>
<td>Pulp and Paper Processes</td>
</tr>
<tr>
<td>CHE565H</td>
<td>Aqueous Process Engineering</td>
</tr>
<tr>
<td>CHE568H</td>
<td>Nuclear Engineering</td>
</tr>
<tr>
<td>CHE575H</td>
<td>Mechanical Properties of Bio-Composites and Biomaterials</td>
</tr>
<tr>
<td>CHE1053H</td>
<td>Electrochemistry</td>
</tr>
<tr>
<td>CHE1108H</td>
<td>Numerical Methods in Chemical Engineering</td>
</tr>
<tr>
<td>CHE1123H</td>
<td>Liquid Biofuels</td>
</tr>
<tr>
<td>CHE1125H</td>
<td>Modelling and Optimization of Chemical and Biomedical Networks</td>
</tr>
<tr>
<td>CHE1133H</td>
<td>Bioprocess Engineering (prerequisite: JCC1313H or equivalent)</td>
</tr>
<tr>
<td>CHE1134H</td>
<td>Advances in Bioengineering</td>
</tr>
<tr>
<td>CHE1135H</td>
<td>Regulatory Affairs for Industrial Biotechnology and Biopharmaceutical Products</td>
</tr>
<tr>
<td>CHE1147H</td>
<td>Data Mining in Engineering</td>
</tr>
<tr>
<td>CHE1148H</td>
<td>Process Data Analytics</td>
</tr>
<tr>
<td>CHE1150H</td>
<td>Industrial Water Technology</td>
</tr>
<tr>
<td>CHE1151H</td>
<td>Engineering Systems Sustainability</td>
</tr>
<tr>
<td>Code</td>
<td>Course Title</td>
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<tr>
<td>CHE1213H</td>
<td>Corrosion</td>
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<tr>
<td>CHE1333H</td>
<td>Biomaterials Engineering for Nanomedicine</td>
</tr>
<tr>
<td>CHE1334H</td>
<td>Organ-on-a-Chip Engineering</td>
</tr>
<tr>
<td>CHE1430H</td>
<td>Hydrometallurgy, Theory, and Practice (MEng only)</td>
</tr>
<tr>
<td>CHE1431H</td>
<td>Environmental Auditing (MEng only)</td>
</tr>
<tr>
<td>CHE1432H</td>
<td>Technical Aspects of Environmental Regulations (MEng only)</td>
</tr>
<tr>
<td>CHE1433H</td>
<td>Air Dispersion Modelling</td>
</tr>
<tr>
<td>CHE1434H</td>
<td>Six Sigma for Chemical Processes</td>
</tr>
<tr>
<td>CHE1435H</td>
<td>Fundamentals of Aerosol Physics and Chemistry</td>
</tr>
<tr>
<td>CHE1475H</td>
<td>Biocomposite Materials</td>
</tr>
<tr>
<td>JCB1349H</td>
<td>Molecular Assemblies: Structure/Function/Properties</td>
</tr>
<tr>
<td>JCC1313H</td>
<td>Environmental Microbiology</td>
</tr>
<tr>
<td>JCR1000Y</td>
<td>An Interdisciplinary Approach to Addressing Global Challenges</td>
</tr>
<tr>
<td>JNC2503H</td>
<td>Environmental Pathways</td>
</tr>
<tr>
<td>JTC1331H</td>
<td>Biomaterials Science</td>
</tr>
<tr>
<td>TEP1010H</td>
<td>Cognitive and Psychological Foundations of Effective Leadership</td>
</tr>
<tr>
<td>TEP1011H</td>
<td>Authentic Leadership: Engineering a Vibrant Future</td>
</tr>
<tr>
<td>TEP1026H</td>
<td>Positive Psychology for Engineers</td>
</tr>
<tr>
<td>TEP1027H</td>
<td>Engineering Presentations</td>
</tr>
<tr>
<td>TEP1029H</td>
<td>The Science of Emotional Intelligence and its Application to Leadership</td>
</tr>
<tr>
<td>TEP1030H</td>
<td>Engineering Careers — Theories and Strategies to Manage Your Career for the Future</td>
</tr>
<tr>
<td>TEP1501H</td>
<td>Leadership and Leading in Groups and Organizations</td>
</tr>
<tr>
<td>TEP1502H</td>
<td>Leadership in Product Design</td>
</tr>
</tbody>
</table>

**MASc and PhD Seminar Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>CHE1102H</td>
<td>Research Methods and Project Execution</td>
</tr>
<tr>
<td>CHE3001H</td>
<td>Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry</td>
</tr>
</tbody>
</table>

\(^0\) Course that may continue over a program. The course is graded when completed.
Chemistry

Chemistry: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Chemistry

MSc

- Fields:
  - Analytical Chemistry;
  - Environmental Chemistry;
  - Inorganic Chemistry;
  - Interdisciplinary;
  - Organic and Biological Chemistry;
  - Physical Chemistry and Chemical Physics;
  - Polymers and Materials Chemistry

PhD

- Fields:
  - Analytical Chemistry;
  - Environmental Chemistry;
  - Inorganic Chemistry;
  - Interdisciplinary;
  - Organic and Biological Chemistry;
  - Physical Chemistry and Chemical Physics;
  - Polymers and Materials Chemistry

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Chemistry, MSc, PhD
- Environmental Studies
  - Chemistry, MSc, PhD
- Next-Generation Precision Medicine
  - Chemistry, PhD

Overview

Faculty members of the Department of Chemistry are world leaders and research offerings are made in a rich array of ever evolving sub-disciplines (physical, organic, biological, materials, inorganic, theoretical, analytical, environmental, and nanochemistry). Research is conducted using state-of-the-art instrumentation housed in laboratories that have been newly built or recently renovated.

Modern facilities are available for research in the Department of Chemistry. The areas of interest cover a wide variety of topics in analytical, biological, environmental, inorganic, organic, materials, polymers, physical, and theoretical chemistry and their related interdisciplinary areas.

Contact and Address

Web: [www.chemistry.utoronto.ca](http://www.chemistry.utoronto.ca)
Email: chem.gradasst@utoronto.ca
Telephone: (416) 978-3605
Fax: (416) 978-1631

Department of Chemistry
University of Toronto
Room 151, Lash Miller Building
80 St. George Street
Toronto, Ontario M5S 3H6
Canada

Chemistry: Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Aspuru-Guzik, Alan - PhD
Batey, Robert Alexander - BA, PhD (Chair and Graduate Chair)
Beharry, Andrew - BSc, PhD
Bender, Timothy - PhD
Brumer, Paul - BSc, PhD
Chan, Arthur - BS, MSc, PhD
Chan, Warren - BSc, PhD
Chin, Jik - MS, PhD
Dhirani, Al-Amin - MSc, PhD
Donaldson, D. James - PhD
Fekl, Ulrich - MSc, PhD
Georges, Michael - BS, PhD
Goh, M Cynthia - PhD
Gunning, Patrick - BS, PhD
Houry, Walid - BS, MS, PhD
Izmaylov, Artur - PhD
Jockusch, Rebecca - BA, PhD
Kanelis, Voula - PhD
Kapral, Raymond - BSc, PhD
Kay, Lewis - PhD
Kelley, Shana - BA, PhD
Kerman, Kagan - BScPhm, MSc, ScD
Kluger, Ronald - AB, AM, PhD
Kraatz, Heinz-Bernhard - BA, MC, PhD
Kumacheva, Eugenia - MSc, PhD
Lautens, Mark - BSc, PhD
Mabury, Scott - BS, PhD
Macdonald, Peter - BS, MS, PhD
McMillen, David - BSc, MS, PhD
Miller, R.J. Dwayne - BSc, PhD
Morris, Robert - BSc, PhD, Fellow NATO
Murphy, Jennifer - BCh, DChem
Nitz, Mark - BSc, PhD
Ozin, Geoffrey - BSc, PhD
Polanyi, John - MSc, PhD, DSc, FRS, FRSC
Prosser, Scott - BSc, MSc, DPhil
Schofield, Jeremy - PhD
Scholes, Greg - MSc, PhD
Members Emeriti

Csizmadia, Imre - MSc, PhD
Jones, Bryan - BSc, PhD, DPhil
Krull, Ulrich - BSc, MSc, PhD
McLean, Stewart - BSc, PhD
Menzinger, Michael - MS, PhD
Robinson, Edward - BSc, PhD, DSc
Tidwell, Thomas - BS, AM, PhD
Valleau, John Philip - PhD

Associate Members

Dicks, Andy - PhD

Chemistry: Chemistry MSc

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with an average equivalent to at least a University of Toronto B+.

Program Requirements

- Coursework. Students must successfully complete 1.0 graduate full-course equivalent (FCE) including at least 0.5 graduate half-course equivalent in chemistry.

Chemistry: Chemistry PhD

Doctor of Philosophy

Applicants may enter the PhD program via one of three routes: 1) following completion of an appropriate master's degree; 2) transfer from the University of Toronto master's program; or 3) direct entry following completion of an appropriate BSc degree.

PhD students select one of the following fields:

- Analytical Chemistry
- Environmental Chemistry
- Inorganic Chemistry
- Organic and Biological Chemistry
- Physical Chemistry and Chemical Physics
- Polymers and Materials Chemistry
- Interdisciplinary, which allows combinations with the other fields, or with other disciplines

Each field requires a minimum of 2.0 to 3.0 full-course equivalents (FCEs) from approved graduate courses, depending on the field of study and the student's academic background. The number of courses required will be determined in consultation with the supervisor. Students who have completed the master's program may be considered for a course reduction of up to 1.0 FCE in the PhD program. Specific requirements for each field follow.

Field: Analytical Chemistry

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
• Appropriate master’s degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
• An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
• Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

• **Coursework.** Students must complete a minimum of **2.0 full-course equivalents (FCEs)** from approved graduate courses:
  - 0.5 FCE in analytical chemistry in each of the areas of spectroscopy, separation science/electrochemistry, and advanced instrumentation/data analysis.
  - An additional 0.5 FCE to support the research program.
  - The number of courses required will be determined in consultation with the supervisor. Students who have completed the master's program may be considered for a course reduction of up to 1.0 FCE in the PhD program.
• Presentation of **two seminars**. Participation in the Analytical Chemistry Seminar (CHM1190Y). Students must complete 25 Analytical Seminar Plus (ASP) points.
• In Year 1, students must complete the **modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry** (0.5 FCE; Credit/No Credit).
• Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
• A written **research proposal**, defended orally, on a topic other than the primary research topic delivered prior to the end of Year 2.
• Successful completion of an **oral comprehensive field examination** in Analytical Chemistry.
• The main requirement for the PhD program is the execution of an original investigation that is presented in a **thesis**.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Field: Environmental Chemistry

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.

• Appropriate master’s degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
• An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
• Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

• **Coursework.** Students must complete a minimum of **2.0 full-course equivalents (FCEs)** from approved graduate courses:
  - CHM1401H Transport and Fate of Chemical Species in the Environment (0.5 FCE).
  - At least one other course in Environmental Chemistry.
  - At least one CHM course to be chosen in consultation with the supervisor/supervisory committee and confirmed by the field representative.
  - The fourth course may be an approved course offered in a cognate department.
• In Year 1, students must complete the **modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry** (0.5 FCE; Credit/No Credit).
• Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
• Presentation of **two seminars** (normally in Years 2 and 4). Participation in the Environmental Chemistry Seminar and colloquia program (CHM1590Y).
• A written **research proposal**, defended orally, on a topic other than the primary research topic delivered prior to the end of Year 2.
• Successful completion of an **oral comprehensive field examination** in Environmental Chemistry, normally completed following coursework and before the end of Year 2.
• The main requirement for the PhD program is the execution of an original investigation that is presented in a **thesis**.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry
Field: Inorganic Chemistry

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
- An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
- Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

- Coursework. Students must complete a minimum of \(2.0\) full-course equivalents (FCEs) from approved graduate courses:
  - One core half course (0.5 FCE): CHM 1270 or CHM1266H.
- In Year 1, students must complete the modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry (0.5 FCE; Credit/No Credit).
- Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
- Participation in the Inorganic Chemistry Seminar (CHM1290Y): the presentation of one seminar each year in Years 2, 3, and 4, including one on an original research proposal.
- Successful completion of an oral comprehensive field examination in Inorganic Chemistry.
- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Field: Organic and Biological Chemistry

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
- An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
- Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

- Coursework. Students must complete a minimum of \(2.0\) full-course equivalents (FCEs) from approved graduate courses:
  - At least two Organic Chemistry graduate half courses selected from CHM1040H to CHM1068H (inclusive).
  - Students may be required to take courses offered in physical organic, synthetic organic, and biological chemistry. The courses will be selected in consultation with the supervisor and confirmed by the Graduate Studies Committee field representative.
- Students must pass six cumulative exams in order for students to qualify to give the oral comprehensive field exam and advance to PhD candidacy. They are generally written on the first Friday of the month from October through May (inclusive).
- In Year 1, students must complete the modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry (0.5 FCE; Credit/No Credit).
- Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
- Participation in the Organic Chemistry Seminar (CHM1090Y): present two seminars, normally in Years 2 and 4.
- Upon completion of coursework and cumulative exams, students will take an oral comprehensive field exam in Organic and Biological Chemistry.
- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry
Field: Physical Chemistry and Chemical Physics

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
- An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
- Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

- Students may select an Experimental Physical Chemistry path requiring:
  - 2.0 full-course equivalents (FCEs) consisting of a combination of two core half courses and two other half courses. The principle is that breadth of background preparation should be the major objective in course selection.
- Or students may select a Theoretical Physical Chemistry path requiring:
  - 3.0 FCEs, including two core half courses. Specifics are to be determined by the research director and the student.
- In Year 1, students must complete the modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry (0.5 FCE; Credit/No Credit).
- Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
- Presentation of two seminars, normally in Years 2 and 4. Participation in the Physical Chemistry Seminar (CHM1490Y).
- Successful completion of an oral comprehensive field examination in Physical Chemistry and Chemical Physics.
- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Field: Polymers and Materials Chemistry

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
- An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
- Transfer to the PhD program may be considered during Year 1 of the master's program.

Program Requirements

- Coursework. Students must complete a minimum of 2.0 full-course equivalents (FCEs) from approved graduate courses:
  - At least one of the three core courses (CHM1206H, CHM1301H, CHM1302H).
  - A list of other courses considered appropriate to the Polymers and Materials Chemistry research area is available from the department.
- In Year 1, students must complete the modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry (0.5 FCE; Credit/No Credit).
- Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
- Presentation of at least three seminars (a literature talk in Year 1 and presentations on the original research in Years 2 and 4). Participation in the Polymers and Materials Chemistry Seminar (CHM1390Y).
- Upon the completion of coursework, successful performance in an oral comprehensive field examination in Polymers and Materials Chemistry.
- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry
Field: Interdisciplinary

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Chemistry's additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum average equivalent to at least a University of Toronto B+.
- An exceptional student with an appropriate BSc degree may be admitted directly to the PhD program.
- Transfer to the PhD program may be considered during Year 1 of the master's program.
- Acceptance into this field requires a research topic of a truly interdisciplinary nature; a written request must be submitted to the Graduate Coordinator.

Program Requirements

- **Coursework.** Students must complete a minimum of 2.0 full-course equivalents (FCEs) including one core half course from the above fields.
- In Year 1, students must complete the modules in CHM3000H Graduate Professional Development for Research and Teaching in Chemistry (0.5 FCE; Credit/No Credit).
- Students must complete a minimum of 18 hours (24 hours for direct-entry students) of additional professional development training spread evenly over the categories: Communication, Personal Effectiveness, and Research and Teaching Skills. Consult with the Graduate Office for a list of eligible activities.
- Presentation of at least two seminars (normally in Years 2 and 4). Participation in the seminar program of an existing field of Chemistry.
- Upon completion of coursework, successful completion of an oral comprehensive field examination in the fields of Chemistry deemed appropriate.
- The main requirement for the PhD program is the execution of an original investigation that is presented in a thesis.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Chemistry: Chemistry MSc, PhD Courses

Not all courses are offered every year. Please consult the department each session as to course availability.

All graduate courses for degree credit must be approved by the department. Subject to departmental permission, degree students in chemistry may take a limited number of graduate courses based on fourth-year Faculty of Arts and Science courses in chemistry or a cognate discipline. Approvals of such fourth-year courses will be considered on an individual basis. Third-year arts and science courses, or their essential equivalents, will not receive degree credit.

Professional Development

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM3000H</td>
<td>Graduate Professional Development for Research and Teaching in Chemistry (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Analytical Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHM1102H</td>
<td>Biosensors and Chemical Sensors</td>
</tr>
<tr>
<td>CHM1103H</td>
<td>Advanced Topics in Analytical Chemistry</td>
</tr>
<tr>
<td>CHM1104H</td>
<td>Separation Science</td>
</tr>
<tr>
<td>CHM1105H</td>
<td>Separations, Chromatography, and Microfluidics</td>
</tr>
<tr>
<td>CHM1106H</td>
<td>Lab Instrumentation</td>
</tr>
<tr>
<td>CHM1107H</td>
<td>The -Omics Revolution and Mass Spectrometry</td>
</tr>
<tr>
<td>CHM1100H</td>
<td>Advances in Electroanalytical Chemistry and Electrochemical Sensors</td>
</tr>
<tr>
<td>CHM1152H</td>
<td>Chemical Sensors</td>
</tr>
<tr>
<td>CHM1190Y</td>
<td>Analytical Chemistry Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>CHM1410H</td>
<td>Analytical Environmental Chemistry</td>
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<tr>
<td>CHM2014H</td>
<td>Research in Analytical Chemistry</td>
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Environmental Chemistry

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHM1401H</td>
<td>Transport and Fate of Chemical Species in the Environment</td>
</tr>
<tr>
<td>CHM1404H</td>
<td>Molecular Analysis of Natural Systems</td>
</tr>
<tr>
<td>CHM1410H</td>
<td>Analytical Environmental Chemistry</td>
</tr>
<tr>
<td>CHM1415H</td>
<td>Atmospheric Chemistry</td>
</tr>
<tr>
<td>CHM1420H</td>
<td>Environmental Chemistry of Soil</td>
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<tr>
<td>CHM1425H</td>
<td>Modelling the Fate of Organic Chemicals in the Environment</td>
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<tr>
<td>CHM1430H</td>
<td>Advanced Topics in Atmospheric Chemistry</td>
</tr>
<tr>
<td>CHM1590Y</td>
<td>Environmental Chemistry Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>CHM2534H</td>
<td>Research in Environmental Chemistry</td>
</tr>
<tr>
<td>EES1105H</td>
<td>Soil Contamination Chemistry</td>
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## Inorganic Chemistry

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHM1204H</td>
<td>Organometallic Chemistry and Catalysis</td>
</tr>
<tr>
<td>CHM1205H</td>
<td>Inorganic Reaction Mechanisms</td>
</tr>
<tr>
<td>CHM1206H</td>
<td>Solid State Chemistry: Structure-Property Relations</td>
</tr>
<tr>
<td>CHM1255H</td>
<td>Supramolecular Chemistry</td>
</tr>
<tr>
<td>CHM1258H</td>
<td>Reactions of Coordinated Ligands</td>
</tr>
<tr>
<td>CHM1263H</td>
<td>Bio-inorganic Chemistry</td>
</tr>
<tr>
<td>CHM1268H</td>
<td>X-Ray Crystallography</td>
</tr>
<tr>
<td>CHM1269H</td>
<td>Nanochemistry: A Chemistry Approach to Nanomaterials</td>
</tr>
<tr>
<td>CHM1270H</td>
<td>Frontiers in Inorganic Chemistry (core course)</td>
</tr>
<tr>
<td>CHM1290Y</td>
<td>Inorganic Chemistry Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>CHM2034H</td>
<td>Research in Inorganic Chemistry</td>
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## Physical and Theoretical Chemistry

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHM1411H</td>
<td>Mathematical Methods</td>
</tr>
<tr>
<td>CHM1433H</td>
<td>Intermediate Quantum Mechanics</td>
</tr>
<tr>
<td>CHM1446H</td>
<td>Quantum Computation and Information Theory</td>
</tr>
<tr>
<td>CHM1448H</td>
<td>Modelling of Biochemical Systems</td>
</tr>
<tr>
<td>CHM1450H</td>
<td>Nanoscale Characterization with Scan Probe Microscopy</td>
</tr>
<tr>
<td>CHM1455H</td>
<td>NMR Spectroscopy I: Basic Theory and Applications for Biological Chemists</td>
</tr>
<tr>
<td>CHM1456H</td>
<td>NMR Spectroscopy II: Advanced Theory and Application</td>
</tr>
<tr>
<td>CHM1464H</td>
<td>Topics in Statistical Mechanics</td>
</tr>
<tr>
<td>CHM1478H</td>
<td>Quantum Mechanics for Physical Chemists (core course)</td>
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<tr>
<td>CHM1480H</td>
<td>Basic Statistical Mechanics (core course)</td>
</tr>
<tr>
<td>CHM1481H</td>
<td>Reaction Kinetics and Dynamics</td>
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<tr>
<td>CHM1482H</td>
<td>Laser Spectroscopy and Photophysics</td>
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<tr>
<td>CHM1490Y</td>
<td>Physical Chemistry Seminar (Credit/No Credit)</td>
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<td>CHM2024H</td>
<td>Research in Physical Chemistry</td>
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## Organic and Biological Chemistry

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<tr>
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<tr>
<td>CHM1003H</td>
<td>Physical Organic Chemistry II</td>
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<tr>
<td>CHM1004H</td>
<td>Synthetic Organic Chemistry</td>
</tr>
<tr>
<td>CHM1005H</td>
<td>Applications of Spectroscopy in Organic Structure Determination</td>
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<tr>
<td>CHM1006H</td>
<td>Bioorganic Chemistry</td>
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<tr>
<td>CHM1008H</td>
<td>Biological Chemistry</td>
</tr>
<tr>
<td>CHM1040H</td>
<td>Modern Organic Synthesis</td>
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<tr>
<td>CHM1045H</td>
<td>Modern Physical Organic Chemistry</td>
</tr>
<tr>
<td>CHM1051H</td>
<td>Current Topics in Chemical Biology</td>
</tr>
<tr>
<td>CHM1054H</td>
<td>Topics in Bio-organic Chemistry</td>
</tr>
<tr>
<td>CHM1056H</td>
<td>Techniques for Studying the Chemical, Structural, and Dynamic Properties of Biomolecules</td>
</tr>
<tr>
<td>CHM1057H</td>
<td>Topics in Synthetic Organic Chemistry</td>
</tr>
<tr>
<td>CHM1059H</td>
<td>Chemical Biology in Complex Systems</td>
</tr>
<tr>
<td>CHM1060H</td>
<td>Advanced Topics in Synthetic Organic Chemistry</td>
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<tr>
<td>CHM1068H</td>
<td>Topics in Biological and Medicinal Chemistry</td>
</tr>
<tr>
<td>CHM1090Y</td>
<td>Organic Chemistry Seminar (Credit/No Credit)</td>
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<td>CHM2044H</td>
<td>Research in Organic Chemistry</td>
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## Polymers and Materials Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>CHM1206H</td>
<td>Solid State Chemistry: Structure-Property Relations</td>
</tr>
<tr>
<td>CHM1300H</td>
<td>Polymer Chemistry</td>
</tr>
<tr>
<td>CHM1301H</td>
<td>Organic and Inorganic Polymer Synthesis</td>
</tr>
<tr>
<td>CHM1302H</td>
<td>Physical Chemistry of Polymers</td>
</tr>
<tr>
<td>CHM1304H</td>
<td>Organic Materials Chemistry</td>
</tr>
<tr>
<td>CHM1390Y</td>
<td>Polymer and Materials Chemistry Seminar (Credit/No Credit)</td>
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<tr>
<td>CHM2304H</td>
<td>Research in Polymer and Materials Chemistry</td>
</tr>
</tbody>
</table>
Cinema Studies

Cinema Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Cinema Studies

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Diaspora and Transnational Studies
  - Cinema Studies, MA
- Sexual Diversity Studies
  - Cinema Studies, MA
- Women and Gender Studies
  - Cinema Studies, MA

Overview

The Cinema Studies Institute (CSI) comprises 13 full-time faculty, whose competencies and research emphases contribute to a curriculum that encompasses film and media history, theory, analysis, and cultural practices. Specializations include: early cinema, technology, sound studies, architecture and space, animal studies, film philosophy, media archaeology, aboriginal cinemas, national cinemas, animation, critical race theory, postcolonial and subaltern studies, gender, migration and diaspora, documentary, digital and expanded cinemas, avant-garde, and experimental film.

The facilities, both at Innis College and in the Media Commons at Robarts Library, are equipped with the latest technologies; include a lending library dedicated to film scholarship archival and restoration facilities; several seminar rooms; mid-sized classrooms; and a lecture and screening facility, the Innis Town Hall, seating 150 visitors and boasting 35 mm, 16 mm, and digibeta capabilities. Students benefit from both the peerless campus resources as well as those institutions associated with Toronto’s wider film and media culture, including the Film Reference Library, TIFF, Bell Lightbox, a multitude of film festivals, and a highly differentiated media production and distribution landscape.

Past graduates of CSI now teach at universities across the continent and are also employed at film and media-related institutions ranging from the Toronto International Film Festival Group to the Pacific Film Archive, serving as respected executives, creators, and curators. The institute is committed to providing students with a rigorous, engaging, and memorable education. Equally important, the institute aims to introduce graduates to a close-knit academic community that shares a common goal: exploring the depth and breadth of film and media scholarship in an environment that stimulates thought and fosters collegiality.

Contact and Address

Web: www.cinema.utoronto.ca
Email: gradcinema.studies@utoronto.ca
Telephone: (416) 978-5809
Fax: (416) 946-0168

Cinema Studies Institute
University of Toronto
Innis College
2 Sussex Avenue
Toronto, Ontario M5S 1J5
Canada

Cinema Studies: Graduate Faculty

Full Members

Ackerman, Alan - BA, MA, PhD
Baumann, Shyon - BA, MA, PhD
Boler, Megan - BA, PhD
Brown, Elspeth - MA, PhD
Budde, Antje - PhD
Cahill, James - AB, MA, PhD, (Director)
Cazdyn, Eric - BA, MA, PhD
Columpar, Corinn - BA, PhD
Fenner, Angelica - BA, MA, PhD
Jagoe, Eva-Lynn - BA, MA, PhD
Jain, Kajri - PhD
Johnson, Stephen - BA, MA, PhD
Kaplan, Louis - AB, AM, DPhil
Keil, Charlie - BA, MA, PhD
Keilty, Patrick - BA, MLIS, PhD
Legge, Elizabeth MM - BA, BA, MA, PhD
Leonard, Garry - BA, MA, PhD
Maurice, Alice - BA, DPhil
Meng, Yue - BA, MA, MA, PhD
Most, Andrea - BA, BA, MA, PhD
Price, Brian - PhD (Graduate Coordinator)
Ricco, John - BA, MA, PhD
Richmond, Scott - BA, PhD
Sammond, Nicholas - BA, MA, PhD
Sutherland, Meghan - PhD
Tcheuyap, Alexie - BA, MA, PhD
Walcott, Rinaldo - BA, MA, PhD

Members Emeriti

Armatage, Kay - BA, MA, PhD

Associate Members

Banning, Kass - MFA, MFA
Cho, Michelle - BA, MA, DPhil
Cinema Studies: Cinema Studies MA

Master of Arts

Program Description

The course-based, one-year MA program offers students the option, during their third term, of pursuing either a professional internship or a major research paper of roughly 40 to 50 pages written under the supervision of a faculty advisor elected by the student. Students have the option to concurrently enrol in one of the collaborative specializations at U of T, such as Sexual Diversity Studies, Women and Gender Studies, or Transnational and Diaspora Studies, which entails also registering for their specific core courses. The MA in Cinema Studies is a full-time program.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Cinema Studies Institute's additional admission requirements stated below.
- Successful completion of an appropriate four-year University of Toronto bachelor's degree, or its equivalent from a recognized university.
- Minimum B+ standing, demonstrated by an average grade in the final year, or over senior-level courses.
- Successful completion of a minimum of 6.0 full-course equivalents (FCEs) in cinema studies, or comparable program preparation.
- A letter of intent addressing the academic goals an applicant wishes to pursue in the program.
- Three letters of recommendation.
- Transcripts from all post-secondary institutions.
- An academic writing sample of no more than 3,000 words.

Program Requirements

- The MA is a coursework-only program and therefore does not require a thesis.
- Students must successfully complete a total of 4.0 full-course equivalents (FCEs) over the course of an academic year, normally extending from September until August, as follows:
  - 1.0 FCE mandatory core courses: CIN1101H and CIN1102H.
  - 1.0 FCE devoted to either the writing of a major research paper (CIN1006Y) or pursuing an internship (CIN1007Y).
  - 2.0 FCEs may be completed in the following way:
    - from elective CIN courses chosen from rotating special topics courses, also under the CIN rubric, but possibly cross-listed with another department, depending on the instructor’s departmental home.
- from film-related courses offered by other units (non-CIN designator) but approved as relevant to the Cinema Studies master's program curriculum.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Cinema Studies: Cinema Studies PhD

Doctor of Philosophy

Program Description

Launched in September 2013, the Doctor of Philosophy program in Cinema Studies addresses the changing role of moving image media within global culture. Past and present configurations of cinema are studied through a constellation of theoretical, textual, social, and historical rubrics. The core curricular offerings engage with debates and questions that persist within the scholarship while also examining how the field contends with emerging disciplinary issues and intermedial formats today and at earlier historical junctures. Throughout the program of study, the synthesis of history and theory, textual analysis, and cultural study is emphasized.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Cinema Studies Institute's additional admission requirements stated below.
- Letter of intent outlining the academic ambitions, including possible thesis topic, the applicant aims to pursue in the program.
- Three letters of recommendation.
- A writing sample.
- Transcripts from all post-secondary institutions.

Program Requirements

- The student's program of study must be approved by the Cinema Studies Institute (CSI).
- **Coursework.** Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE required courses: CIN2100H History and Historiography of Cinematic Media and CIN2101H Pressures on the Cinematic. Students who have already taken these courses, or their equivalent, will be required to enrol in alternate course selections, with the Graduate Coordinator's approval.
  - 1.5 FCEs offered in cinema studies.
1.0 FCE elective courses offered in cinema studies or by other graduate units and chosen in consultation with the student's faculty advisor.

0.5 FCE: CIN2999H Research Seminar in Cinema Studies (Credit/No Credit).

- All coursework is normally completed by December of Year 2 of study, except for CIN2999H which may extend beyond that date.
- Completion of one Qualifying Examination. Students generally undertake the Qualifying Examination after the completion of coursework in Year 2 of study.
  - The Qualifying Examination covers two special fields and has two components: a written examination and an oral examination. These exams are scheduled by the student's supervisor and committee members. Examinations are marked on a pass/fail basis. (Should the committee deem their work exceptional, students may pass with distinction.) Students are allowed two attempts to pass the written examination and two attempts to pass the oral examination.

- Students must have completed all requirements for the degree, exclusive of thesis research, by the end of Year 3 of study in order to remain in good academic standing and in order to achieve candidacy.
- Completion of a PhD dissertation based on original research conducted by the candidate on an approved topic in cinema studies. The dissertation proposal should be approved by the supervisor no later than May of Year 2 of PhD studies. Each student is required to meet at least annually with a supervisory committee, which includes the supervisor and two faculty members, to review academic progress, and to consult about future directions.
  - The thesis must be presented within six years of first enrolment in the PhD program. Successful defence at the SGS Doctoral Final Oral Examination.

Program Length

4 years full-time

Time Limit

6 years full-time

Cinema Studies: Cinema Studies MA, PhD Courses

Not all elective courses are offered every year. The department should be consulted each session as to elective and non-CIN course offerings.

MA Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN1101H</td>
<td>Theories and Practices of Cinema</td>
</tr>
<tr>
<td>CIN1102H</td>
<td>Key Developments in Film History</td>
</tr>
</tbody>
</table>

Elective Courses (Subject to Change)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN1005H</td>
<td>Special Studies in Cinema</td>
</tr>
<tr>
<td>CIN1008H</td>
<td>Independent Research and Reading in Cinema Studies</td>
</tr>
<tr>
<td>CIN1011H</td>
<td>Colour and the Moving Image</td>
</tr>
<tr>
<td>CIN1100H</td>
<td>The Textual Object</td>
</tr>
<tr>
<td>CIN1772H</td>
<td>The Politics of Non-Fiction Film</td>
</tr>
<tr>
<td>CIN3002H</td>
<td>Cinema and Nation</td>
</tr>
<tr>
<td>CIN3004H</td>
<td>Documentary and Non-fiction Media</td>
</tr>
<tr>
<td>CIN3006H</td>
<td>Media and Philosophy</td>
</tr>
<tr>
<td>CIN3008H</td>
<td>Topics in Film and Media History</td>
</tr>
<tr>
<td>CIN3010H</td>
<td>Topics in Film and Media Theory</td>
</tr>
<tr>
<td>CIN6153H</td>
<td>Race and Cinema</td>
</tr>
<tr>
<td>CIN6803H</td>
<td>Intertextuality in Feminist Cinema: The Counter-Cinematic Impulse</td>
</tr>
<tr>
<td>JFF1100H</td>
<td>Surrealism and French Cinema</td>
</tr>
<tr>
<td>JFF1101H</td>
<td>The Art of Exploration: How to Think the World</td>
</tr>
</tbody>
</table>

PhD Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN2100H</td>
<td>History and Historiography of Cinematic Media</td>
</tr>
<tr>
<td>CIN2101H</td>
<td>Pressures on the Cinematic</td>
</tr>
<tr>
<td>CIN2999H</td>
<td>Research Seminar in Cinema Studies (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Plus one of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN1006Y</td>
<td>Major Research Paper in Cinema Studies</td>
</tr>
<tr>
<td>CIN1007Y</td>
<td>Internship in Cinema Studies</td>
</tr>
</tbody>
</table>
Civil and Mineral Engineering

Civil and Mineral Engineering: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Civil Engineering

MASc
- Emphasis:
  - Sustainable Energy

MEng
- Emphases:
  - Advanced Water Technologies;
  - Analytics;
  - Building Science;
  - Concrete;
  - Construction Management;
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  - Environmental Engineering;
  - Forensic Engineering;
  - Geomechanics;
  - Structural Engineering;
  - Sustainable Energy;
  - Sustainable Urban Systems;
  - Transportation Engineering and Planning

PhD
- Emphasis:
  - Sustainable Energy

Cities Engineering and Management

MEngCEM

Combined Degree Programs
- UTSC, Environmental Biology (Specialist), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Biology (Specialist Co-op), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Chemistry (Specialist), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Chemistry (Specialist Co-op), Honours BSc / Civil Engineering, Meng

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Engineering Education
  - Civil Engineering, MASc, PhD
- Environmental Studies
  - Civil Engineering, MASc, MEng, MEngCEM, PhD
- Psychology and Engineering
  - Civil Engineering, MASc, PhD

Overview

The research conducted in the Department of Civil and Mineral Engineering is addressing the need for innovative solutions to society’s needs, from the deep underground to the world’s tallest structures. The dedicated students, staff, and professors are pursuing exciting research ranging from nanoscale investigations into water contamination and concrete properties, to the large-scale tests of structures under full-scale simulated earthquakes, to development of real-time mass transit models to solve urban congestion. Research is informed by extensive collaboration and interaction with industry and government partners. Facilities and breadth of research expertise are among the best in the world, offering great opportunities for involvement in ground-breaking research.

The Department of Civil and Mineral Engineering is organized into five interdisciplinary research themes: Cities & Infrastructure; Complex Systems; Energy & Environment; Mining & Subsurface Systems; and Transformative Technologies. These themes encompass the traditional civil engineering areas of Structural Engineering; Transportation Engineering; Environmental Engineering; Building Engineering and Construction Management; and Mining and Geomechanics.

Contact and Address

Admission Inquiries

Web: civmin.utoronto.ca
Email: graduateadmissions@civ.utoronto.ca
Telephone: (416) 978-3099
Fax: (416) 978-6813

Note: please direct all admission inquiries to graduateadmissions@civ.utoronto.ca (not civ.gradprograms@utoronto.ca).
Civil and Mineral Engineering: Graduate Faculty

Full Members

Abdulhai, Baher - BEng, MEng, PhD, PEng
Andrews, Robert - BASc, MASc, PhD, PEng
Andrews, Susan - BSc, MSc, PhD
Azhari, Faezeh - BEng, PhD
Bentz, Evan - BASc, PhD, PEng
Bobicki, Erin - BASc, PhD
Christopoulos, Constantin - BE, MASc, PhD, PEng
Collins, Michael - BE, PhD, PEng
Drake, Jennifer Anne Pauline - BEng, MASc, PhD, PEng
El-Diraby, Tamer - BSc, MSc, PhD, PEng
Esmaeili, Kamran - BSc, MSc, PhD
Gauvreau, Paul - BSc, PhD, PEng
Goodfellow, Sebastian - MASc, PhD
Grabinsky, Murray - BASc, MASc, PhD, PEng
Grasselli, Giovanni - PhD, PEng
Hadjigeorgiou, John - DiplGeol, BASc, ME, DPhil, PEng
Harrison, John Paul - BSc, MSc, PhD
Hatzopoulos, Marianne - BSc, BSc, MSc, MSc, PhD, PhD
Hofmann, Ronald - BEng, MASc, PhD, PEng
Hooton, R Douglas - BASc, MASc, PhD, PEng
Karney, Bryan - BSc, MEng, PhD, PEng
Kennedy, Christopher - BEng, MEng, MBA, MASc, PhD, PEng
Kwon, Oh-Sung - BS, MS, MS, PhD, PEng
MacLean, Heather L. - BASc, MASc, MBA, PhD, PEng
McCabe, Brenda - BASc, PhD, PEng
Mercan, Oya - BS, MS, PhD
Meyer, David - PhD, PhD, PhD
Miller, Eric - BASc, MASc, PhD
Nurul Habib, Khandker - MS, PhD, PEng
Packer, Jeffrey - BE, MSc, DSc, PhD, PEng
Panesar, Daman - BE, ME, PhD, PEng
Passeport, Elodie - MSc, MSc, PhD
Peterson, Karl - BS, MS, PhD, PEng
Posen, I. Daniel - BA, MSc, MRes, PhD
Pressnail, Kim - BASc, PhD, PEng
Roorda, Matthew - BEng, MASc, PhD, PEng
Saxe, Shoshanna - MSc, PhD
Shalaby, Amer - BSc, MASc, PhD, PEng
Sheikh, Shamim - BSE, MASc, PhD, PEng
Siegel, Jeffrey Alexander - BS, MS, PhD
Sleep, Brent - BSc, MASc, PhD, PEng (Chair and Graduate Chair)
Vanderburg, Willem - BASc, MASc, PhD, PEng
Vecchio, Frank - BASc, MEng, PhD, PEng
Warren, Lesley Alice - BSc, PhD
Windisch, Marianne Touchie - BASc, PhD
Xia, Kaiwen - BASc, MS, PhD, PEng
Young, Paul - BSc, MSc, PhD, CEng

Members Emeriti

Birkemoe, Peter - BS, MSc, PhD
Ganczarczyk, Jerzy - MSc, DSc, DrHab
Hauer, Ezra - BSc, MSc, PhD
Hurdle, Vanolin - BS, MEng, PhD
Mohanty, Bibhu - BSc, MA, MTech, PhD
Selby, Kenneth - BASc, MBA, PhD
Soberman, Richard - BSc, SM, PhD
Steuart, Gerald - BSc, MS, PhD
Timusk, John - BASc, MASc, PhD
Will, George - BASc, MASc

Associate Members

Bergerson, Joule A. - BSc, MEng, MS, PhD
Hazzard, James - BSc, PhD
Hoornweg, Daniel - BSc, MSc, PhD
Le-Tuan Pham, Anh - PhD
Seica, Michael - DiplIng, PhD
Slack, Enid - PhD

Civil and Mineral Engineering: Civil Engineering MASc

Master of Applied Science

Program Description

The MASc program includes a foundational base of graduate courses followed by a research thesis. Many research projects involve industrial partnerships and networking opportunities, project management experience, and collaboration with leading experts.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering's additional admission requirements stated below.
- A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of a mid B (3.0 out of 4.0, or 75%). Required grades must be achieved in each of the final two years of undergraduate study. Competitive admission averages are typically near or above 80% (A–).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Students who do not possess an undergraduate degree in civil engineering may be required to take more than the usual time and number of courses.
Program Requirements

- Each student, in consultation with a staff member at the beginning of the program, will establish the distribution of time between coursework and thesis or design project.
- **Coursework.** Normally, students must complete a minimum of **2.5 full-course equivalents (FCEs)** (five half courses).
- **Research thesis.**
- Students must participate in the non-credit seminar course JDE1000H *Ethics in Research* during their first or second session of registration.
- In addition to the core research area, students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Civil Engineering MASC, MEng, PhD Emphases section.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Civil and Mineral Engineering: Civil Engineering MEng

Master of Engineering

Program Description

The MEng program is course based and intended to provide continuing and advanced education for recent graduates and civil engineers in professional practice. The program can be taken on a full-time, extended full-time, or part-time basis.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering’s additional admission requirements stated below.
- A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of a mid-B (3.0 out of 4.0 or 75%). Required grades must be achieved in each of the final two years of undergraduate study.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Students who do not possess an undergraduate degree in civil engineering may be required to take more than the usual time and number of courses.

Program Requirements

- Each student, in consultation with a staff member at the beginning of the program, will establish the distribution of time between coursework and thesis or design project.
- **Coursework.** Normally, students must complete **5.0 full-course equivalents (FCEs)** (10 half courses). Up to two half courses (1.0 FCE) may be replaced by a research/design project.
- Students have the option of completing an emphasis in Advanced Water Technologies; Analytics; Building Science; Concrete; Construction Management; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Environmental Engineering; Forensic Engineering; Geomechanics; Structural Engineering; Sustainable Energy; Sustainable Urban Systems; or Transportation Engineering and Planning as part of their degree program. Please see details in the Civil Engineering MASC, MEng, PhD Emphases section.

Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering’s additional admission requirements stated below.
- A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of a mid-B (3.0 out of 4.0 or 75%). Required grades must be achieved in each of the final two years of undergraduate study.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Students who do not possess an undergraduate degree in civil engineering may be required to take more than the usual time and number of courses.
Program Requirements

- Each student, in consultation with a staff member at the beginning of the program, will establish the distribution of time between coursework and thesis or design project.
- Coursework. Normally, students must complete 5.0 full-course equivalents (FCEs) (10 half courses). Up to two half courses (1.0 FCE) may be replaced by a research/design project.
- Students are expected to complete the requirements in six sessions (two years) and are limited to six half courses per year and three half courses per session.
- Students have the option of completing an emphasis in Advanced Water Technologies; Analytics; Building Science; Concrete; Construction Management; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Environmental Engineering; Forensic Engineering; Geomechanics; Structural Engineering; Sustainable Energy; Sustainable Urban Systems; or Transportation Engineering and Planning as part of their degree program. Please see details in the Civil Engineering MASc, MEng, PhD Emphasises section.

Program Length

6 sessions extended full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering’s additional admission requirements stated below.
- A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of a mid-B (3.0 out of 4.0 or 75%). Required grades must be achieved in each of the final two years of undergraduate study.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Students who do not possess an undergraduate degree in civil engineering may be required to take more than the usual time and number of courses.

Program Requirements

- Each student, in consultation with a staff member at the beginning of the program, will establish the distribution of time between coursework and thesis or design project.
- Coursework. Normally, students must complete 5.0 full-course equivalents (FCEs) (10 half courses). Up to two half courses (1.0 FCE) may be replaced by a research/design project.
- Students are limited to four half courses per year and two half courses per session. Students normally complete the requirements in nine sessions.
- Students have the option of completing an emphasis in Advanced Water Technologies; Analytics; Building Science; Concrete; Construction Management; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Environmental Engineering; Forensic Engineering; Geomechanics; Structural Engineering; Sustainable Energy; Sustainable Urban Systems; or Transportation Engineering and Planning as part of their degree program. Please see details in the Civil Engineering MASc, MEng, PhD Emphasises section.

Program Length

9 sessions

Time Limit

6 years

Civil and Mineral Engineering: Civil Engineering PhD

Doctor of Philosophy

Program Description

The PhD program is designed for outstanding individuals interested in a rewarding career in fundamental or applied research. This program involves advanced courses and an intensive research program culminating in a thesis.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MASc degree in engineering, mathematics, physics, or chemistry; 2) transfer from the University of Toronto MASc program; 3) direct entry following completion of a bachelor’s degree.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering’s additional admission requirements stated below.
- A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of B+ (3.3 out of 4.0 or 78%). Required grades must be achieved in each of the final two years of undergraduate study. Competitive admission averages are typically near or above 80% (A–).
Civil and Mineral Engineering: Civil Engineering MASc, MEng, PhD Emphases

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete a total of 2.0 full-course equivalents (FCEs) (four half courses). This includes at least one course (0.5 FCE) selected from the core course list. The remaining courses must be selected from the elective course list.

- Core courses (complete at least one):
  - CHE1150H Industrial Water Technology
  - CIV1308H Physical and Chemical Treatment Processes
  - CIV1309H Biological Treatment Processes
  - CIV1311H Advanced and Sustainable Drinking Water Treatment

- Elective courses (complete remaining courses):
  - CHE565H Aqueous Process Engineering
  - CHE1213H Corrosion
  - CHE1430H Hydrometallurgy Theory and Practice
  - CIV541H Environmental Biotechnology
  - CIV549H Groundwater Flow and Contamination
  - CIV550H Water Resources Engineering
  - CIV1303H Water Resources Systems Modeling
  - CIV1319H Chemistry and Analysis of Water and Wastes
  - CIV1330H Water, Sanitation, Hygiene, and Global Health
  - CIV1399H Special Studies in Civil Engineering

Enrolment Contact

Enrolment in the emphasis is permitted at any time during the MEng program. After students are admitted to the normal MEng program, students may contact Prof. Ron Hofmann, (416) 946-7508.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, students will receive a transcript notation from the Faculty Graduate Studies office (subject to Prof. Hofmann’s recommendation).

Program Requirements

- **Students with a MASc degree** (or equivalent in the same area of study) must complete a minimum of 2.0 full-course equivalents (FCEs) (four half courses).
- **Students with an MEng degree** must complete a minimum of 4.5 FCEs (nine half courses). Up to 3.0 FCEs (six graduate half courses) may be used from the MEng program towards the PhD course requirements.
- Students enrolled in the MASc degree program who transfer to the PhD program must complete a total of 4.5 full-course equivalents (FCEs) (nine half courses).
- For **direct-entry** students, more FCEs may be required depending on the student’s background preparation. It is normally expected that at least one of the half courses will be taken outside of the student’s principal area of research.
- **Comprehensive examination** after completing most of the coursework and preferably within one year after first enrolment in the PhD program. This examination consists of a four- to five-day take-home written examination, followed approximately a week later by an oral examination. The examination is administered by a Comprehensive Examination Committee created and supervised by the department’s Graduate Studies Committee.
- **Residence.** Students normally must spend at least two academic years of their program on campus on a full-time basis.
- The academic program must be approved by the department’s Graduate Studies Committee during the student’s first session.
- Students must participate in the non-credit seminar course JDE1000H Ethics in Research during their first or second session of registration.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Civil Engineering MASc, MEng, PhD Emphases section.

Program Length

- 4 years full-time; 5 years transfer-from-master’s; 5 years direct-entry

Time Limit

- 6 years full-time; 7 years transfer-from-master’s; 7 years direct-entry

- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Applicants must satisfy the department of the ability to undertake advanced research.
- Admission directly from a bachelor’s degree is permitted in exceptional cases.
- If a student transfers from a master’s degree program to a PhD program, courses taken during the master’s program may be applied to the PhD program.

Program Requirements

- **Students with an MASc degree** (or equivalent in the same area of study) must complete a minimum of 2.0 full-course equivalents (FCEs) (four half courses).
- **Students with an MEng degree** must complete a minimum of 4.5 FCEs (nine half courses). Up to 3.0 FCEs (six graduate half courses) may be used from the MEng program towards the PhD course requirements.
- Students enrolled in the MASc degree program who transfer to the PhD program must complete a total of 4.5 full-course equivalents (FCEs) (nine half courses).
- For **direct-entry** students, more FCEs may be required depending on the student’s background preparation. It is normally expected that at least one of the half courses will be taken outside of the student’s principal area of research.
- **Comprehensive examination** after completing most of the coursework and preferably within one year after first enrolment in the PhD program. This examination consists of a four- to five-day take-home written examination, followed approximately a week later by an oral examination. The examination is administered by a Comprehensive Examination Committee created and supervised by the department’s Graduate Studies Committee.
- **Residence.** Students normally must spend at least two academic years of their program on campus on a full-time basis.
- The academic program must be approved by the department’s Graduate Studies Committee during the student’s first session.
- Students must participate in the non-credit seminar course JDE1000H Ethics in Research during their first or second session of registration.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Civil Engineering MASc, MEng, PhD Emphases section.

Program Requirements

- **Students with an MASc degree** (or equivalent in the same area of study) must complete a minimum of 2.0 full-course equivalents (FCEs) (four half courses).
- **Students with an MEng degree** must complete a minimum of 4.5 FCEs (nine half courses). Up to 3.0 FCEs (six graduate half courses) may be used from the MEng program towards the PhD course requirements.
- Students enrolled in the MASc degree program who transfer to the PhD program must complete a total of 4.5 full-course equivalents (FCEs) (nine half courses).
- For **direct-entry** students, more FCEs may be required depending on the student’s background preparation. It is normally expected that at least one of the half courses will be taken outside of the student’s principal area of research.
- **Comprehensive examination** after completing most of the coursework and preferably within one year after first enrolment in the PhD program. This examination consists of a four- to five-day take-home written examination, followed approximately a week later by an oral examination. The examination is administered by a Comprehensive Examination Committee created and supervised by the department’s Graduate Studies Committee.
- **Residence.** Students normally must spend at least two academic years of their program on campus on a full-time basis.
- The academic program must be approved by the department’s Graduate Studies Committee during the student’s first session.
- Students must participate in the non-credit seminar course JDE1000H Ethics in Research during their first or second session of registration.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Civil Engineering MASc, MEng, PhD Emphases section.

Program Length

- 4 years full-time; 5 years transfer-from-master’s; 5 years direct-entry

Time Limit

- 6 years full-time; 7 years transfer-from-master’s; 7 years direct-entry
Emphasis: Analytics (MEng only)

To be admitted to the emphasis in Analytics, MEng students must first successfully complete a prerequisite course APS1070H (0.5 full-course equivalent [FCE]).

Subsequently, to earn the emphasis, students must successfully complete four additional half courses (2.0 FCEs) from the list of core courses or elective courses. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Students must have completed the prerequisite course APS1070H before taking any of the core courses.

Prerequisite Course
APS1070H Foundations of Data Analytics and Machine Learning

Core Courses
CHE1147H Data Mining in Engineering
ECE1513H Introduction to Machine Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1504H)
MIE1624H Introduction to Data Science and Analytics
MSE1065H Application of Artificial Intelligence in Materials Design (exclusion: MSE1063H)

Elective Courses (others can be approved by the emphasis coordinator):
CIV514H, CIV536H, CIV577H, CIV1279H, CIV1299H, MIE515H, MIE1240H.

Emphasis: Building Science (MEng only)

MEng students must successfully complete at least six half courses (3.0 full-course equivalents [FCEs]), one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Building Science emphasis coordinator.

Core Courses (take at least four):
CIV575H Building Science
CIV576H Sustainable Buildings
CIV578H Design of Building Enclosures
CIV1282H Case Studies in Building Science
CIV1320H Indoor Air Quality
MIE507H HVAC Fundamentals

Elective Courses (others can be approved by the emphasis coordinator):

Emphasis: Concrete (MEng only)

MEng students must successfully complete six of the following technical courses (3.0 full-course equivalents [FCEs], one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Concrete emphasis coordinator.

CIV514H, CIV517H, CIV1201H, CIV1250H, CIV1252H, CIV1260H.

Emphasis: Construction Management (MEng only)

MEng students must successfully complete six of the following technical courses (3.0 full-course equivalents [FCEs], one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Construction Management emphasis coordinator.


Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) chosen from Group A.

Group A
APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B
APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.

Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)'s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.
Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcript should contact the Faculty Graduate Studies office.

### Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

**Leadership**

- TEP1010H
- TEP1011H
- TEP1026H
- TEP1027H
- TEP1029H
- TEP1030H
- TEP1501H
- TEP1502H
- TEP1601H

**Entrepreneurship and Innovation**

- APS1012H
- APS1013H
- APS1015H
- APS1023H
- APS1033H
- APS1035H
- APS1036H
- APS1041H
- APS1061H
- APS1088H

**Finance and Management**

- AER1601H
- APS502H
- APS1001H
- APS1004H
- APS1005H
- APS1009H
- APS1016H
- APS1017H
- APS1020H
- APS1022H
- APS1028H
- APS1032H
- APS1038H
- APS1039H
- APS1040H
- APS1043H
- APS1049H
- APS1050H
- APS1051H
- APS1052H

### Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses) from the list below.

**Core Course**

- MSE1031H Forensic Engineering.

**Elective Courses**

- AER1604H
- APS1034H
- APS1040H
- APS1101H
- BME1460H
- BME1800H
- BME1801H
- BME1802H
- CHE561H
- CHE568H
- CHE1213H
- CHE1431H
- CHE1432H
- CHE1434H
- CHE1436H
- CIV510H
- CIV518H
- CIV1163H
- CIV1171H
- CIV1174H
- CIV1190H
- CIV1201H
- CIV1279H
- CIV1282H
- CIV1422H
- CIV1429H
- JMB1050H
- JNC2503H
- MIE507H
- MIE533H
- MIE566H
- MIE1301H
- MIE1303H
- MIE1411H
- MIE1414H
- MIE1616H
- MIE1708H
- MIE1713H
- MIE1714H
- MIE1721H
- MIE1723H
- MIE1727H
- MIE1804H
- MSE1015H
- MSE1016H
- MSE1022H
- MSE1032H
- MSE1067H.

### Emphasis: Geomechanics (MEng only)

MEng students must successfully complete six of the following technical courses (3.0 full-course equivalents [FCEs], one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Geomechanics emphasis coordinator.

- CIV523H
- CIV1404H
- CIV1419H
- CIV1420H
- CIV1429H
- CIV1498H
- CIV1499H
- MIN540H
- MIN565H.

### Emphasis: Structural Engineering (MEng only)

MEng students must successfully complete six of the following technical courses (3.0 full-course equivalents [FCEs], one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Structural Engineering emphasis coordinator.

- CIV510H
- CIV514H
- CIV515H
- CIV517H
- CIV518H
- CIV519H
- CIV1163H
- CIV1164H
- CIV1167H
- CIV1169H
- CIV1171H
- CIV1174H
- CIV1175H
- CIV1180H
- CIV1361H.
Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least **three half courses (1.5 full-course equivalents [FCEs])** from either of the following lists below.
- **A thesis** towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- **Four half courses (2.0 FCEs)** from either of the following lists below, including at least one core course (0.5 FCE).

### Core Courses

- **APS1032H Introduction to Energy Project Management**
- **MIE515H Alternative Energy Systems**
- **MIE1120H Current Energy Infrastructure and Resources**

### Elective Courses


Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.

Emphasis: Sustainable Urban Systems (MEng only)

MEng students must successfully complete **six of the following technical courses (3.0 full-course equivalents [FCEs]), one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Sustainable Urban Systems emphasis coordinator.**


Emphasis: Transportation Engineering and Planning (MEng only)

MEng students must successfully complete **six of the following technical courses (3.0 full-course equivalents [FCEs]), one or two of which may be a one-session (CIV1001H) or two-session (CIV1002Y) project (not listed below). Other courses may be considered but will require approval of the Transportation Engineering and Planning emphasis coordinator.**

- **CIV516H, CIV531H, CIV536H, CIV1307H, CIV1506H, CIV1508H, CIV1532H, CIV1535H, CIV1536H, CIV1538H.**

Civil and Mineral Engineering: Civil Engineering MASc, MEng, PhD Courses

Not all courses are given every year. Some courses may require a prerequisite. Please consult the department.

### General Interest

- **APS1012H** Managing Business Innovation and Transformational Change
- **APS1043H** Writing Your Own Patent Application
- **APS1070H** Foundations of Data Analytics and Machine Learning
- **CIV1001H** MEng Project I
- **CIV1002Y** MEng Project II
- **CIV1099H** Special Studies in Civil Engineering
- **CIV1289H** The Business of Knowledge in Civil Engineering
- **CIV1504H** Applied Probability and Statistics for Civil Engineering
- **CIV1539H** Evaluation of Civil Engineering Systems
- **CIV1540H** Urban Operations Research

### Building Engineering

- **CIV514H** Concrete Technology
- **CIV536H** Urban Activity, Air Pollution, and Health
- **CIV575H** Building Science
- **CIV576H** Sustainable Buildings
- **CIV577H** Infrastructure for Sustainable Cities
- **CIV578H** Design of Building Enclosures
- **CIV580H** Engineering and Management of Large Projects
## Civil and Mineral Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV1201H</td>
<td>Concrete Technology and Non-Destructive Testing Principles</td>
</tr>
<tr>
<td>CIV1240H</td>
<td>Building Performance Assessment (prerequisite: CIV375, CIV575, or instructor approval)</td>
</tr>
<tr>
<td>CIV1250H</td>
<td>Instrumentation Techniques in Concrete Technology</td>
</tr>
<tr>
<td>CIV1252H</td>
<td>Repair and Maintenance of Concrete Structures</td>
</tr>
<tr>
<td>CIV1260H</td>
<td>Chemistry of Cements and Concrete (prerequisite: CIV514H)</td>
</tr>
<tr>
<td>CIV1262H</td>
<td>Microscopy Applied to Concrete and Geomaterials</td>
</tr>
<tr>
<td>CIV1275H</td>
<td>Construction Modeling Methods</td>
</tr>
<tr>
<td>CIV1278H</td>
<td>Pre-Project Planning and Constructability Analysis</td>
</tr>
<tr>
<td>CIV1279H</td>
<td>Construction Contract Documents</td>
</tr>
<tr>
<td>CIV1280H</td>
<td>Building Envelope Design</td>
</tr>
<tr>
<td>CIV1281H</td>
<td>Asset Management</td>
</tr>
<tr>
<td>CIV1282H</td>
<td>Case Studies in Building Science</td>
</tr>
<tr>
<td>CIV1298H</td>
<td>Special Studies in Civil Engineering</td>
</tr>
<tr>
<td>CIV1299H</td>
<td>Special Studies in Civil Engineering</td>
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</table>

## Geomechanics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CIV521H</td>
<td>Rock Mechanics</td>
</tr>
<tr>
<td>CIV523H</td>
<td>Geotechnical Design</td>
</tr>
<tr>
<td>CIV1404H</td>
<td>Material Fracture Dynamics: Experimental Methods</td>
</tr>
<tr>
<td>CIV1420H</td>
<td>Soil Properties and Behaviour</td>
</tr>
<tr>
<td>CIV1421H</td>
<td>Continuum Mechanics of Fluids and Solids</td>
</tr>
<tr>
<td>CIV1422H</td>
<td>Dynamic Response of Engineering Materials</td>
</tr>
<tr>
<td>CIV1429H</td>
<td>Advanced Rock Engineering: Rock Engineering in Fractured Rock Masses</td>
</tr>
<tr>
<td>CIV1430H</td>
<td>Engineering Rock Mechanics</td>
</tr>
<tr>
<td>CIV1499H</td>
<td>Special Studies in Civil Engineering</td>
</tr>
<tr>
<td>CME500H</td>
<td>Fundamentals of Acid Rock Drainage</td>
</tr>
<tr>
<td>MIN511H</td>
<td>Integrated Mine Waste Engineering</td>
</tr>
<tr>
<td>MIN540H</td>
<td>Borehole Geophysics for Engineers and Geoscientists</td>
</tr>
<tr>
<td>MIN565H</td>
<td>Design and Support of Underground Mine Excavations</td>
</tr>
</tbody>
</table>

## Structural Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV510H</td>
<td>Solid Mechanics II</td>
</tr>
<tr>
<td>CIV514H</td>
<td>Concrete Technology</td>
</tr>
<tr>
<td>CIV515H</td>
<td>Introduction to Structural Dynamics</td>
</tr>
<tr>
<td>CIV517H</td>
<td>Prestressed Concrete Structures</td>
</tr>
<tr>
<td>CIV518H</td>
<td>Behaviour and Design of Steel Structures</td>
</tr>
<tr>
<td>CIV519H</td>
<td>Structural Analysis II</td>
</tr>
<tr>
<td>CIV1163H</td>
<td>Mechanics of Reinforced Concrete</td>
</tr>
<tr>
<td>CIV1164H</td>
<td>Bridge Engineering</td>
</tr>
<tr>
<td>CIV1167H</td>
<td>Advanced Structural Dynamics</td>
</tr>
<tr>
<td>CIV1169H</td>
<td>Advanced Topics in Building Design</td>
</tr>
<tr>
<td>CIV1171H</td>
<td>Earthquake Engineering and Seismic Design</td>
</tr>
<tr>
<td>CIV1174H</td>
<td>Finite Element Methods in Structural Mechanics</td>
</tr>
<tr>
<td>CIV1175H</td>
<td>Design of Tubular Steel Structures</td>
</tr>
<tr>
<td>CIV1180H</td>
<td>Advanced Modeling Methods for Seismic Performance Assessment of Structures</td>
</tr>
<tr>
<td>CIV1190H</td>
<td>Structures Under Blast and Impact</td>
</tr>
<tr>
<td>CIV1199H</td>
<td>Special Studies in Civil Engineering</td>
</tr>
<tr>
<td>CIV1361H</td>
<td>Reinforced and Prestressed Concrete Structures</td>
</tr>
</tbody>
</table>
Civil and Mineral Engineering: Cities Engineering and Management MEngCEM

Master of Engineering in Cities Engineering and Management

Program Description

Cities are the economic engines of the world. Highly skilled professionals, armed with both technical expertise and a fundamental understanding of the cross-disciplinary issues, are needed to help our cities tackle challenges to ensure the well-being of their inhabitants and economies. In the Master of Engineering: Cities Engineering and Management (MEngCEM) program, students prepare for rewarding careers in government and the private sector, addressing the critical issues and growing needs of urban centres.

To proactively respond to the changing needs of cities, the MEngCEM program offers students a practicum to apply what they have learned in the classroom.

The MEngCEM program can be completed through full-time studies over three continuous sessions or through an extended full-time (EFT) option over six sessions.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering's additional admission requirements stated below.
  - A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of mid-B (3.0 out of 4.0 or 75%). Competitive admission averages are typically near or above 80% (A–).
  - Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
  - Applicants with backgrounds in an applied science other than engineering may be admitted.
  - Applicants must have one year of work experience before admission to the program.

Program Requirements

- Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - 4.0 FCEs (eight half courses) consisting of
    - four core courses:
      - CEM1001H The Challenges of Urban Policy-Making
      - CEM1002H Data Analytics and Cities
      - CEM1003H Infrastructure and Urban Prosperity
      - CEM1004H Cities as Complex Systems
    - three infrastructure engineering electives in one of eight specialization areas (see course listing below)
    - one technology management elective (see course listing below).
  - 1.0 FCE Practicum typically completed during the Summer of Year 1.

Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Civil Engineering's additional admission requirements stated below.
  - A completed undergraduate degree equivalent to a four-year University of Toronto program with a minimum final-year grade point average (GPA) of mid-B (3.0 out of 4.0 or 75%). Competitive admission averages are typically near or above 80% (A–).
  - Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must...
demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

- Applicants with backgrounds in an applied science other than engineering may be admitted.
- Applicants must have one year of work experience before admission to the program.

### Program Requirements

- Students must successfully complete a total of **5.0 full-course equivalents (FCEs)** as follows:
  - 4.0 FCEs (eight half courses) consisting of
    - four core courses:
      - CEM1001H The Challenges of Urban Policy-Making
      - CEM1002H Data Analytics and Cities
      - CEM1003H Infrastructure and Urban Prosperity
      - CEM1004H Cities as Complex Systems
    - three infrastructure engineering electives in one of eight specialization areas (see course listing below)
    - one technology management elective (see course listing below).
  - 1.0 FCE Practicum typically completed during the Summer of Year 2.

### Program Length

6 sessions (typical registration sequence: F/W/S/F/W/S)

### Time Limit

3 years

### Civil and Mineral Engineering: Cities Engineering and Management MEngCEM Courses

Courses must be approved by the Program Director.

#### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEM1001H</td>
<td>The Challenges of Urban Policy-Making</td>
</tr>
<tr>
<td>CEM1002H</td>
<td>Empirical Study of Cities</td>
</tr>
<tr>
<td>CEM1003H</td>
<td>Infrastructure and Urban Prosperity</td>
</tr>
<tr>
<td>CEM1004H</td>
<td>Cities as Complex Systems</td>
</tr>
<tr>
<td>CEM1000Y</td>
<td>Cities Engineering and Management Practicum</td>
</tr>
</tbody>
</table>

### Infrastructure Engineering Course Electives


The course selection (subject to change) in each infrastructure engineering specialization area is:

#### Cybersecurity

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE568H</td>
<td>Computer Security Planning</td>
</tr>
<tr>
<td>ECE1508H</td>
<td>Special Topics in Communications</td>
</tr>
<tr>
<td>ECE1518H</td>
<td>Seminar in Identity, Privacy, and Security</td>
</tr>
<tr>
<td>ECE1776H</td>
<td>Computer Security, Cryptography, and Privacy</td>
</tr>
</tbody>
</table>

#### Communications Networks

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE1508H</td>
<td>Special Topics in Communications</td>
</tr>
<tr>
<td>ECE1520H</td>
<td>Data Communications I</td>
</tr>
<tr>
<td>ECE1524H</td>
<td>Service Provider Networks</td>
</tr>
<tr>
<td>ECE1541H</td>
<td>Communication Networks I</td>
</tr>
<tr>
<td>ECE1545H</td>
<td>Bridges and Routers Planning</td>
</tr>
<tr>
<td>ECE1548H</td>
<td>Advanced Network Architectures</td>
</tr>
</tbody>
</table>

#### Environmental Issues for Health Cities

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHE1433H</td>
<td>Air Dispersion Modelling</td>
</tr>
<tr>
<td>CIV549H</td>
<td>Groundwater Flow and Contamination</td>
</tr>
<tr>
<td>CIV1303H</td>
<td>Water Resources Systems Modelling</td>
</tr>
<tr>
<td>CIV1308H</td>
<td>Physical and Chemical Treatment Processes</td>
</tr>
<tr>
<td>CIV1309H</td>
<td>Biological Treatment Processes</td>
</tr>
<tr>
<td>CIV1311H</td>
<td>Advanced and Sustainable Drinking Water Treatment</td>
</tr>
<tr>
<td>CIV1330H</td>
<td>Water, Sanitation, Hygiene, and Global Health</td>
</tr>
</tbody>
</table>

#### Operations Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIE1603H</td>
<td>Integer Programming</td>
</tr>
<tr>
<td>MIE1616H</td>
<td>Research Topics in Healthcare Engineering</td>
</tr>
<tr>
<td>MIE1620H</td>
<td>Linear Programming and Network Flows</td>
</tr>
<tr>
<td>MIE1621H</td>
<td>Non-Linear Optimization</td>
</tr>
<tr>
<td>MIE1721H</td>
<td>Reliability</td>
</tr>
<tr>
<td>MIE1723H</td>
<td>Engineering Asset Management</td>
</tr>
<tr>
<td>MIE1727H</td>
<td>Quality Assurance I</td>
</tr>
</tbody>
</table>
### Resilience of Critical Infrastructure

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS1024H</td>
<td>Infrastructure Resilience Planning</td>
</tr>
<tr>
<td>APS1025H</td>
<td>Infrastructure Protection</td>
</tr>
<tr>
<td>APS1031H</td>
<td>Infrastructure Planning</td>
</tr>
<tr>
<td>URD1044H</td>
<td>Urban Design and Development</td>
</tr>
<tr>
<td>URD2041H</td>
<td>Business and Land Use Planning in Real Estate Development</td>
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</table>

### Sustainable Energy Systems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APS10H</td>
<td>Innovative Technologies and Organizations in Global Energy Systems</td>
</tr>
<tr>
<td>ECE1092H</td>
<td>Smart Grid Case Studies</td>
</tr>
<tr>
<td>MIE115H</td>
<td>Alternative Energy Systems</td>
</tr>
<tr>
<td>MIE1120H</td>
<td>Current Energy Infrastructure and Resources</td>
</tr>
<tr>
<td>MIE1240H</td>
<td>Wind Power</td>
</tr>
<tr>
<td>MIE1715H</td>
<td>Life Cycle Engineering</td>
</tr>
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</table>

### Transportation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CIV516H</td>
<td>Public Transit Operations and Planning</td>
</tr>
<tr>
<td>CIV531H</td>
<td>Transport III — Planning</td>
</tr>
<tr>
<td>CIV506H</td>
<td>Freight Transportation and ITS Applications</td>
</tr>
<tr>
<td>CIV508H</td>
<td>Airport Planning and Engineering</td>
</tr>
<tr>
<td>CIV532H</td>
<td>Fundamentals of ITS and Traffic Management</td>
</tr>
<tr>
<td>CIV535H</td>
<td>Transportation and Development</td>
</tr>
<tr>
<td>CIV538H</td>
<td>Transportation Demand Analysis</td>
</tr>
<tr>
<td>CIV598H</td>
<td>Special Studies in Civil Engineering — Transportation: Urban Operations Research</td>
</tr>
</tbody>
</table>

### Urban Structures

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APS1024H</td>
<td>Infrastructure Resilience Planning</td>
</tr>
<tr>
<td>APS1025H</td>
<td>Infrastructure Protection</td>
</tr>
<tr>
<td>CIV576H</td>
<td>Sustainable Buildings</td>
</tr>
<tr>
<td>CIV1164H</td>
<td>Bridge Engineering</td>
</tr>
<tr>
<td>CIV1167H</td>
<td>Advanced Structural Dynamics</td>
</tr>
<tr>
<td>CIV1169H</td>
<td>Advanced Topics in Building Design</td>
</tr>
<tr>
<td>CIV1252H</td>
<td>Repair and Maintenance of Concrete Structures</td>
</tr>
</tbody>
</table>

### Technology Management Course Electives

The course list is subject to change.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APS1001H</td>
<td>Project Management</td>
</tr>
<tr>
<td>APS1005H</td>
<td>Operations Research for Engineering Management</td>
</tr>
<tr>
<td>APS1009H</td>
<td>Natural Resources Management</td>
</tr>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1015H</td>
<td>Social Entrepreneurship</td>
</tr>
<tr>
<td>APS1016H</td>
<td>Financial Management for Engineers</td>
</tr>
<tr>
<td>APS1017H</td>
<td>Supply Chain Management and Logistics</td>
</tr>
<tr>
<td>APS1024H</td>
<td>Infrastructure Resilience Planning</td>
</tr>
<tr>
<td>APS1025H</td>
<td>Infrastructure Protection</td>
</tr>
<tr>
<td>APS1031H</td>
<td>Infrastructure Planning</td>
</tr>
<tr>
<td>APS1036H</td>
<td>Formative Experiential Entrepreneurial Learning (FEEL)</td>
</tr>
<tr>
<td>APS1037H</td>
<td>Infrastructure Engineering in Remote First Nation Communities in Ontario</td>
</tr>
<tr>
<td>APS1038H</td>
<td>Strategic Sustainability Management for Businesses and Products</td>
</tr>
<tr>
<td>APS1039H</td>
<td>Enterprise Risk Management</td>
</tr>
<tr>
<td>APS1040H</td>
<td>Quality Control for Engineering Management</td>
</tr>
<tr>
<td>APS1088H</td>
<td>Business Planning and Execution for Canadian Entrepreneurs</td>
</tr>
<tr>
<td>APS1202H</td>
<td>Engineering and Sustainable Development</td>
</tr>
<tr>
<td>CHE1435H</td>
<td>Fundamentals of Aerosol Physics and Chemistry</td>
</tr>
<tr>
<td>CIV1307H</td>
<td>Life Cycle Assessment and Sustainability of Engineering Activities</td>
</tr>
<tr>
<td>TEP1010H</td>
<td>Cognitive and Psychological Foundations of Effective Leadership</td>
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</tbody>
</table>
Classics

Classics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Classics

MA and PhD

- Fields:
  - Greek and Roman History and Material Culture;
  - Greek and Roman Literature;
  - Ancient Philosophy

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Ancient and Medieval Philosophy
  - Classics, PhD
- Book History and Print Culture
  - Classics, MA, PhD
- Jewish Studies
  - Classics, MA, PhD
- Mediterranean Archaeology
  - Classics, PhD
- Sexual Diversity Studies
  - Classics, MA, PhD
- Women and Gender Studies
  - Classics, MA, PhD

Overview

The Department of Classics provides advanced training in the fields of Greek and Roman History and Material Culture, Greek and Roman Literature, and Ancient Philosophy. Collaborative specializations, listed above, are available to students enrolled in the specified participating degree programs.

Information about admission, application procedures, and funding is available from the department.

Contact and Address

Web: classics.utoronto.ca
Email: grad.classics@utoronto.ca
Telephone: (416) 978-5513
Fax: (416) 978-7307

Classics: Graduate Faculty

Full Members

Akrigg, Ben - BA, PhD
Barney, Rachel - BA, PhD
Bendlin, Andreas - PhD
Bernard, Seth - BA, PhD (Graduate Coordinator, Associate Chair)
Blouin, Katherine - BA, MA, PhD, DPhil
Boys-Stones, George - MA, DPhil
Bruun, Christer - BA, MA, PhD
Burgess, Jonathan - BA, MA, PhD
Chrubasik, Boris - MA, PhD
Dewar, Michael - BA, MA, DPhil
Gunderson, Erik - BA, MA, PhD
Hoeschele, Regina - MA, PhD
Keith, Alison - BA, MA, PhD, FRSC
Lytle, Ephraim - BA, PhD
Magee, John - BA, MA, PhD
Revermann, Martin - PhD
Welsh, Jarrett - BA, MA, PhD
Wilkinson, Kevin - MA, PhD
Wohl, Victoria - BA, MA, PhD (Chair and Graduate Chair)

Members Emeriti

Barnes, Timothy - BA, MA, DPhil, FRSC
Beck, Roger - BA, MA, PhD
Grant, John - BA, MA, PhD
Inwood, Brad - BA, MA, PhD, FRSC
Irwin, Marjorie - BA, PhD, PhD
McDonough, Christopher - BA, MA, PhD
Rist, John - MA
Traill, John - BA, MA, PhD

Associate Members

Balot, Ryan - BA, AM, PhD
Ewald, Bjoern - AM, PhD
Kloppenborg, John - BA, MA, PhD
Knappett, Carl - MA, PhD
Marshall, John - BA, MA, PhD
O'Hogan, Cillian - PhD
Orwin, Clifford - AB, AM, PhD
Weinrib, Ernest - BA, LLB, PhD, Cecil A. Wright Chair
Yu, Kenneth - PhD
Classics: Classics MA

Master of Arts

Program Description

Applicants may be admitted to either the two-year MA program or the one-year advanced-standing option, depending on their level of preparation. At the time of application, students are encouraged to indicate their preference for one of the three fields offered: Greek and Roman History and Material Culture, Greek and Roman Literature, and Ancient Philosophy. The MA program may be taken on a part-time basis.

MA Program (Two-Year)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Classics’ additional admission requirements stated below.
- Successful completion of an appropriate bachelor’s program in classics or a related field, with at least a B+ average in the final year. For applicants who expect to focus on the areas of Greek and Roman Literature or Ancient Philosophy, the equivalent of three years of training in either Greek or Latin and two years of training in the other language is recommended. For applicants who expect to focus on the area of Greek and Roman History and Material Culture, the equivalent of three years of training in either Greek or Latin and demonstrated excellence in the study of Greek and Roman history and material culture is recommended.
- Students who are otherwise qualified but who lack the required amount of training in Greek and Latin or in Greek and Roman history and material culture should consult with the department about further preparation.

Program Requirements

- **Year 1:** Students normally complete at least 3.0 full-course equivalents (FCEs) selected in consultation with the Graduate Coordinator from departmental language courses and seminars. Students who do not complete these courses with appropriate standing may be required to withdraw from the MA program or to retake the courses.
- **Year 2:** Students normally complete at least 3.0 FCEs, including the Graduate Research Paper, selected in consultation with the Graduate Coordinator, and complete the sight translation examination and qualifying examination(s) required by the field they have chosen in consultation with the Graduate Coordinator.
  - Completion of one (0.5 FCE) of GRK1000H or LAT1000H (intensive advanced language skills), or equivalent, or a course from the GRK/LAT1800H series, with a grade of at least B–.
  - Completion of three additional graduate courses (1.5 FCEs).
- Completion of the Ancient History methods course (CLA3020Y), only for students whose area is Greek and Roman History and Material Culture.
- Completion of CLA2000Y (1.0 FCE) Graduate Research Paper with a grade of at least B. Each student is assigned to a faculty advisor for CLA2000Y and works independently on the preparation of a research paper (about 8,000 words in length). The Graduate Research Paper is assessed by a committee of two faculty members, including the advisor.
- Completion of the sight translation examination in either Greek or Latin with a grade of at least B–.
- Completion of the Greek qualifying examination and the Latin qualifying examination (three-hour translation exam in each language, including both prose and poetry) with a grade of at least B–. Students whose field is Greek and Roman History and Material Culture may choose to satisfy this requirement by:
  - completing either the Greek or the Latin qualifying examination with a grade of at least B– and by completing one language course in the other language with a grade of at least B+, or by
  - earning credit for the relative 1000H Advanced Language Studies course.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
9 sessions part-time

Time Limit

3 years full-time;
6 years part-time

MA Program (One-Year Advanced-Standing Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Classics’ additional admission requirements stated below.
- Successful completion of an appropriate bachelor’s program in classics or a related field, with at least a B+ average in the final year. For applicants who expect to focus on the areas of Greek and Roman Literature or Ancient Philosophy, the equivalent of at least three and preferably four years of training in Greek and Latin is recommended. For applicants who expect to focus on the area of Greek and Roman History and Material Culture, the equivalent of three years of training in either Greek or Latin and demonstrated excellence in the study of Greek and Roman history and material culture is recommended.
- Students who are otherwise qualified but who lack the required amount of training in Greek and Latin or in Greek and Roman history and material culture should consult with the department about further preparation.
Program Requirements

- Students normally complete at least 3.0 full-course equivalents (FCEs), including the Graduate Research Paper, selected in consultation with the Graduate Coordinator, and complete the sight translation examination and qualifying examination(s).
  - Completion of one (0.5 FCE) of GRK1000H or LAT1000H (intensive advanced language skills), or equivalent, or a course from the GRK/LAT1800H series, with a grade of at least B–.
  - Completion of three additional graduate courses (1.5 FCEs).
  - Completion of the Ancient History methods course (CLA3020Y), only for students whose area is Greek and Roman History and Material Culture.
  - Completion of CLA2000Y (1.0 FCE) Graduate Research Paper with a grade of at least B. Each student is assigned to a faculty advisor for CLA2000Y and works independently on the preparation of a research paper (about 8,000 words in length). The Graduate Research Paper is assessed by a committee of two faculty members, including the advisor.
  - Completion of the sight translation examination in either Greek or Latin with a grade of at least B–.
  - Completion of the Greek qualifying examination and the Latin qualifying examination (three-hour translation exam in each language, including both prose and poetry) with a grade of at least B–. Students whose field is Greek and Roman History and Material Culture may only choose to satisfy this requirement by:
    - completing either the Greek or the Latin qualifying examination with a grade of at least B– and by completing one language course in the other language with a grade of at least B+.
    - earning credit for the relative 1000H Advanced Language Studies course.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 9 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Classics: Classics PhD

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Classics' additional admission requirements stated below.
- Successful completion of a strong master's program in classics or a related field (with at least a B+ average overall and at least one A–). All students must have the equivalent of at least four years of training in either Latin or Greek and at least three years in the other language, and a broad preparation in the reading of ancient texts in the original languages.

Program Requirements

- **Coursework.** Satisfactory completion of:
  - GRK1000H (0.5 FCE) or equivalent
  - LAT1000H (0.5 FCE) or equivalent.
- At the department's discretion, students who need additional preparation may be required to take a selection of courses approved by the department during Year 1 before beginning to prepare for the qualifying examinations. Students will be notified of such additional requirements at the time of their offers of admission or early in their first session.
  - CLA2000Y (1.0 FCE) Graduate Research Paper with a grade of at least A–. Doctoral students who complete the Graduate Research Paper at a lower standard which nevertheless satisfies the MA requirement will be granted the MA. Students admitted with advanced standing are exempt from the Graduate Research Paper.
  - 10 seminars with an A– average, including at least two outside the student’s field of specialization (one of which must not be offered or cross-listed by the Department of Classics).
  - Satisfactory participation for at least two years in the seminar series for the student’s field (SRD4444Y0 or AMP2000Y).

- **Qualifying exam.** Completion of the Greek qualifying examination and Latin qualifying examination with grades of at least B+. One of these exams must be passed by the end of Year 2, and both must be passed by the end of Year 3 of the PhD. Doctoral students who complete the qualifying examinations at a lower standard which nevertheless satisfies the MA requirement will be granted the MA.
- Satisfactory completion of sight translation examinations in both Greek and Latin with grades of at least B+. This requirement must be completed before the major field examination is attempted. Students whose field is Greek and Roman History may satisfy this requirement with a grade of at least B+ on the sight translation examination in one language and a grade of at least B on the sight translation examination in the other language.
- Demonstration of adequate reading knowledge of two languages of research other than English, one of which will normally be German, before the major field examination is attempted.
- Satisfactory completion of the major field examination (CLA4000Y0). The major field defines a broad area of specialization, within which the dissertation topic will fall. It is normally established by Year 3 of the program and is directed by the supervisory committee. Preparation for the major field examination includes the completion of a satisfactory research essay. The major field is examined by means of two written examinations, one of which must involve translation from the list of primary sources, and an oral examination covering the research essay and the examination papers. The major field examination should be completed by the middle of Year 4.
- The dissertation should be completed by the end of Year 5.
Program Length

5 years

Time Limit

6 years

0 Course that may continue over a program. The course is graded when completed.

PhD Program (Advanced-Standing)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Classics’ additional admission requirements stated below.
- Applicants are admitted with advanced standing if they have successfully completed a strong master’s program in Classics. Students who have completed the MA program in Classics at the University of Toronto are required to have grades of at least B+ in all graded coursework and a grade of at least A– on the Graduate Research Paper CLA2000Y.

Program Requirements

- Coursework. Satisfactory completion of:
  - GRK1000H (0.5 FCE) or equivalent
  - LAT1000H (0.5 FCE) or equivalent.
- 10 seminars with an A– average, including at least two outside the student’s field of specialization (one of which must not be offered or cross-listed by the Department of Classics). Students who have completed CLA2000Y with a grade of at least B+ need 8 seminars with an A– average.
- Satisfactory participation for at least two years in the seminar series for the student’s field (SRD4444Y0 or AMP2000Y). This includes the Ancient History methods course for those students whose field is Greek and Roman History and Material Culture.
- Qualifying exams.
  - Completion of the Greek qualifying examination and Latin qualifying examination with grades of at least B+.
  - Students whose field is Greek and Roman History and Material Culture may choose to complete either the Greek qualifying examination or the Latin qualifying examination with a grade of B+ based on the MA reading list instead of the PhD reading list. Students in this field who are enrolled in the Mediterranean Archaeology collaborative specialization (MACS) may choose to satisfy the other language examination by passing an 1800H-level language course in the other language with a B+.
  - Satisfactory completion of sight translation examinations in both Greek and Latin with grades of at least B+. This requirement must be completed before the major field examination is attempted. Students whose field is Greek and Roman History and Material Culture may satisfy this requirement with a grade of at least B+ on the sight translation examination in one language and a grade of at least B– on the sight translation examination in the other language. Students in this field who are enrolled in the Mediterranean Archaeology collaborative specialization (MACS) may choose to satisfy the other language examination by passing an 1800H-level language course in the other language with a B+.
  - Demonstration of adequate reading knowledge of two languages of research other than English, one of which will normally be German, before the major field examination is attempted.
  - Satisfactory completion of the major field examination (CLA4000Y0). The major field defines a broad area of specialization, within which the dissertation topic will fall. It is normally established by Year 2 of the four-year PhD program and is directed by the supervisory committee. Preparation for the major field examination includes the completion of a satisfactory research essay. The major field is examined by means of two written examinations, one of which may involve translation from the list of primary sources, and an oral examination covering the research essay and the examination papers. The major field examination should be completed by the middle of Year 3 of the four-year PhD program.
  - The dissertation should be completed by the end of Year 4.

Program Length

4 years

Time Limit

6 years

0 Course that may continue over a program. The course is graded when completed.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Classics’ additional admission requirements stated below.
- Successful completion of a strong bachelor’s program in classics of a related field with at least an A– average in the final year. For students who expect to focus on the areas of examinations at a lower standard which nevertheless satisfies the MA requirement will be granted the MA.
  - Completion of the respective Area examination with a grade of at least B+ for students whose field is Greek and Roman Literature or Greek and Roman History and Material Culture.
  - Satisfactory completion of sight translation examinations in both Greek and Latin with grades of at least B+. This requirement must be completed before the major field examination is attempted. Students whose field is Greek and Roman History and Material Culture may satisfy this requirement with a grade of at least B+ on the sight translation examination in one language and a grade of at least B– on the sight translation examination in the other language. Students in this field who are enrolled in the Mediterranean Archaeology collaborative specialization (MACS) may choose to satisfy the other language examination by passing an 1800H-level language course in the other language with a B+.
  - Demonstration of adequate reading knowledge of two languages of research other than English, one of which will normally be German, before the major field examination is attempted.
  - Satisfactory completion of the major field examination (CLA4000Y0). The major field defines a broad area of specialization, within which the dissertation topic will fall. It is normally established by Year 2 of the four-year PhD program and is directed by the supervisory committee. Preparation for the major field examination includes the completion of a satisfactory research essay. The major field is examined by means of two written examinations, one of which may involve translation from the list of primary sources, and an oral examination covering the research essay and the examination papers. The major field examination should be completed by the middle of Year 3 of the four-year PhD program.
  - The dissertation should be completed by the end of Year 4.

Program Length

4 years

Time Limit

6 years

0 Course that may continue over a program. The course is graded when completed.
Greek and Roman Literature or Ancient Philosophy, at least three years of study in both Greek and Latin and a broad preparation in the reading of ancient texts in the original languages is recommended. For applicants who expect to focus on the area of Greek and Roman History and Material Culture, the equivalent of three years of training in either Greek or Latin, familiarity with the other language, and demonstrated excellence in the study of Greek and Roman history and material culture is required.

Program Requirements

- **Coursework.** Satisfactory completion of:
  - GRK1000H (0.5 FCE) or equivalent
  - LAT1000H (0.5 FCE) or equivalent.
- 10 seminars with an A– average, including at least two outside the student’s field of specialization (one of which must not be offered or cross-listed by the Department of Classics).
- With permission of the Graduate Coordinator, two of the seminars in Year 1 may be exchanged for CLA2000Y (1.0 FCE) Graduate Research Paper. A grade of A– is required for completion. Doctoral students who complete the Graduate Research Paper at a lower standard which nevertheless satisfies the MA requirement will be granted the MA.
- Satisfactory participation for at least two years in the seminar series for the student’s field (SRD4444Y or AMP2000Y). This includes the Ancient History methods course for those students whose field is Greek and Roman History and Material Culture.
- **Qualifying exams.**
  - Completion of the Greek qualifying examination and Latin qualifying examination with grades of at least B+.
  - Students in the Greek and Roman History and Material Culture field may choose to complete either the Greek qualifying examination or the Latin qualifying examination with a grade of B+ based on the MA reading list instead of the PhD reading list. Students in this field who are enrolled in the Mediterranean Archaeology collaborative specialization (MACS) may choose to satisfy the other language examination by passing an 1800H-level language course in that language with a B+. One of these exams must be passed by the end of Year 2, and both must be passed by the end of Year 3 of the five-year PhD program. Doctoral students who complete the qualifying examinations at a lower standard which nevertheless satisfies the MA requirement will be granted the MA.
  - Completion of the respective Area examination with a grade of at least B+ for students whose field is Greek and Roman Literature or Greek and Roman History and Material Culture.
- **Satisfactory completion of sight translation examinations** in both Greek and Latin with grades of at least B+. This requirement must be completed before the major field examination is attempted. Students whose field is Greek and Roman History and Material Culture may satisfy this requirement with a grade of at least B+ on the sight translation examination in one language and a grade of at least B– on the sight translation examination in the other language. Students in this area of emphasis who are enrolled in the Mediterranean Archaeology collaborative specialization (MACS) may choose to satisfy the other language examination by passing an 1800H-level language course in that language with a B+.
- Demonstration of adequate reading knowledge of two languages of research other than English, one of which will normally be German, before the major field examination is attempted.
- Satisfactory completion of the **major field examination** (CLA4000Y). The major field defines a broad area of specialization, within which the dissertation topic will fall. It is normally established by Year 3 of the program and is directed by the supervisory committee. Preparation for the major field examination includes the completion of a satisfactory research essay. The major field is examined by means of two written examinations, one of which may involve translation from the list of primary sources, and an oral examination covering the research essay and the examination papers. The major field examination should be completed by the middle of Year 4.
- The **dissertation** should be completed by the end of Year 5.

Program Length

5 years

Time Limit

7 years

Course that may continue over a program. The course is graded when completed.

**Classics: Classics MA, PhD Courses**

Not all courses are offered every year. Please consult the department for course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMP2000Y</td>
<td>Collaborative Specialization in Ancient and Medieval Philosophy (CSAMP) Proseminar</td>
</tr>
<tr>
<td>CLA2000Y</td>
<td>Graduate Research Paper</td>
</tr>
<tr>
<td>CLA3020H</td>
<td>Research Methods in Ancient History</td>
</tr>
<tr>
<td>CLA3200Y</td>
<td>Work in Progress in Ancient History</td>
</tr>
<tr>
<td>CLA4000Y</td>
<td>Major Field</td>
</tr>
<tr>
<td>GRK1000H</td>
<td>Advanced Studies in Greek Language (Credit/No Credit)</td>
</tr>
<tr>
<td>GRK1800H</td>
<td>Special Topics in Greek Literature</td>
</tr>
<tr>
<td>GRK1801H</td>
<td>Special Topics in Greek History</td>
</tr>
<tr>
<td>GRK1810H</td>
<td>Classical Greek Literature and Culture</td>
</tr>
<tr>
<td>GRK1811H</td>
<td>Hellenistic Literature and Culture</td>
</tr>
<tr>
<td>GRK2505Y</td>
<td>Greek Sight Exam</td>
</tr>
<tr>
<td>JCO5121H</td>
<td>Classics and Theory</td>
</tr>
<tr>
<td>LAT1000H</td>
<td>Advanced Studies in Latin Language (Credit/No Credit)</td>
</tr>
</tbody>
</table>
LAT1800H  Special Topics in Latin Literature
LAT1801H  Special Topics in Roman History
LAT1806H  Readings in the Roman Historians
LAT1809H  Readings in Roman Republican Literature and Culture
LAT1810H  Readings in Roman Imperial Literature and Culture
LAT2505Y  Latin Sight Exam
SRD4444Y  Ancient History Seminar/Literature Seminar

*Course that may continue over a program. The course is graded when completed.*

**Research Seminars**

The following courses are open to students in other departments with the permission of the instructor and the Department of Classics. See the departmental brochure or website for language requirements. Not all courses are offered every year. See the departmental brochure or website for course offerings in the current year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>LAT1800H</td>
<td>Special Topics in Latin Literature</td>
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<tr>
<td>LAT1801H</td>
<td>Special Topics in Roman History</td>
</tr>
<tr>
<td>LAT1806H</td>
<td>Readings in the Roman Historians</td>
</tr>
<tr>
<td>LAT1809H</td>
<td>Readings in Roman Republican Literature and Culture</td>
</tr>
<tr>
<td>LAT1810H</td>
<td>Readings in Roman Imperial Literature and Culture</td>
</tr>
<tr>
<td>LAT2505Y</td>
<td>Latin Sight Exam</td>
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<tr>
<td>SRD4444Y</td>
<td>Ancient History Seminar/Literature Seminar</td>
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<tr>
<td>JMT1000H</td>
<td>Andronicus of Rhodes and the Early Peripatos</td>
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<tr>
<td>JMT1002H</td>
<td>Augustine: Soliloquia</td>
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**Directed Reading**

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<tr>
<td>CLA1300Y</td>
<td>Studies in Classical Antiquity</td>
</tr>
<tr>
<td>CLA1301H</td>
<td>Studies in Classical Antiquity</td>
</tr>
<tr>
<td>CLA1303H</td>
<td>Studies in Classical Antiquity</td>
</tr>
<tr>
<td>CLA1305H</td>
<td>Studies in Classical Latin</td>
</tr>
<tr>
<td>CLA1306H</td>
<td>Studies in Greek Literature I</td>
</tr>
<tr>
<td>CLA1308H</td>
<td>Studies in Latin Literature I</td>
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<td>CLA1309H</td>
<td>Studies in Latin Literature II</td>
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<table>
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<tbody>
<tr>
<td>CLA5000H</td>
<td>Early Greek Epic</td>
</tr>
<tr>
<td>CLA5004H</td>
<td>Studies in Greek Poetry</td>
</tr>
<tr>
<td>CLA5007H</td>
<td>Criticism of Latin Poetry</td>
</tr>
<tr>
<td>CLA5009H</td>
<td>Literature of the Roman Republic</td>
</tr>
<tr>
<td>CLA5010H</td>
<td>Virgil</td>
</tr>
<tr>
<td>CLA5012H</td>
<td>Studies in Ancient Philosophy I</td>
</tr>
<tr>
<td>CLA5013H</td>
<td>Studies in Ancient Science</td>
</tr>
<tr>
<td>CLA5015H</td>
<td>Latin Poetry of the Empire</td>
</tr>
<tr>
<td>CLA5016H</td>
<td>Topics in Greek and Hellenistic History</td>
</tr>
<tr>
<td>CLA5018H</td>
<td>Topics in Roman History</td>
</tr>
<tr>
<td>CLA5020H</td>
<td>Studies in Ancient Philosophy II</td>
</tr>
<tr>
<td>CLA5021H</td>
<td>Topics in the Study of Greek and Hellenistic Literature and Culture</td>
</tr>
<tr>
<td>CLA5022H</td>
<td>Topics in the Study of Greek and Hellenistic Society</td>
</tr>
<tr>
<td>CLA5023H</td>
<td>Topics in the Study of Roman Literature and Culture</td>
</tr>
<tr>
<td>CLA5024H</td>
<td>Topics in the Study of Roman Society</td>
</tr>
<tr>
<td>CLA5025H</td>
<td>Topics in Greek and Hellenistic History II</td>
</tr>
<tr>
<td>CLA5026H</td>
<td>Topics in Graeco-Roman Historiography I</td>
</tr>
<tr>
<td>CLA5027H</td>
<td>Topics in Graeco-Roman Historiography II</td>
</tr>
<tr>
<td>CLA5028H</td>
<td>Topics in Graeco-Roman History I</td>
</tr>
<tr>
<td>CLA5029H</td>
<td>Topics in Graeco-Roman History II</td>
</tr>
</tbody>
</table>
Comparative Literature

Comparative Literature: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Comparative Literature

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - Comparative Literature, MA, PhD
- Diaspora and Transnational Studies
  - Comparative Literature, MA, PhD
- Jewish Studies
  - Comparative Literature, MA, PhD
- Sexual Diversity Studies
  - Comparative Literature, MA, PhD
- South Asian Studies
  - Comparative Literature, MA, PhD
- Women and Gender Studies
  - Comparative Literature, MA, PhD

Overview

The Centre for Comparative Literature offers Master of Arts and Doctor of Philosophy degree programs to students qualified to pursue literary studies involving multiple languages. Students pursue research across languages and national literatures, engaging with theoretical issues that cross traditional disciplines. The centre’s faculty and students work across linguistic boundaries, employing rigorous critical and theoretical lenses to bring into dialogue literature and other cultural forms that are often kept apart by artificially constructed institutional, geographical or ideological boundaries.

At the heart of the research by faculty and students is the close engagement with cultural products in their original languages. Knowledge of languages is a key component in our practice of Comparative Literature. Comparative Literature examines both the contexts of literature and the interaction among literatures. The practice of Comparative Literature at Toronto extends to visual expression as well, with film, photography or graphic novels figuring prominently in the projects of many faculty and students. Graduate programs at the Centre for Comparative Literature foster rigorous reading practices and theoretical reflection.

Interested applicants should consult the Centre's website. It provides updated information about course scheduling and academic profiles of graduate faculty.

Contact and Address

Web: complit.utoronto.ca
Email: baba.nguyen@utoronto.ca
Telephone: (416) 813-4041
Fax: (416) 813-4040

Centre for Comparative Literature
University of Toronto
Isabel Bader Theatre
3rd Floor, 93 Charles Street West
Toronto, Ontario M5S 1K9
Canada

Comparative Literature: Graduate Faculty

Full Members

Bahoor, Haytham - BA, MA, PhD
Bai, Ruoyun - BA, MA, PhD
Cazdyn, Eric - BA, MA, PhD
Comay, Rebecca - BA, MA, PhD
Dhiarmada, Briona - PhD
Dowling, Sarah - AB, AM, PhD
Esonwanne, Uzoma - BA, MA, PhD
Havercroft, Barbara - BA, MA, PhD
Jagoe, Eva-Lynn - BA, MA, PhD
Kleber, Pia - BA, MA, MA, PhD
Komaromi, Ann - MA, DPhil
Kortenaar, Neil ten - BA, MA, PhD
LeBlanc, Julie - BA, PhD
Nyquist, Mary - BA, MA, PhD
Ricco, John - BA, MA, PhD (Associate Director)
Ross, Jill - BA, MA, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sakaki, Atsuko - BA, MA, PhD
Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Ambros, Veronika - MA, PhD
Davis, Natalie - BA, MA, PhD
Kushner, Eva - BA, MPH, PhD
Lahusen, Thomas - MA, PhD
Li, Victor - BA, MA, PhD
Perron, Paul - PhD
Stock, Brian - AB, PhD

Associate Members

Budde, Antje - PhD
Clark, Caryl - BMus, MA, PhD
Driscol, Kari - MA, PhD
Esterhammer, Angela - BA, PhD
Fernandez, David Andres - BA, MLS
Goetschel, Willi - PhD
Comparative Literature: Comparative Literature MA

Master of Arts

Program Description

The Comparative Literature MA program is a course-based program that accommodates a diverse range of students’ interests. The interdisciplinary and transnational character of the program is reflected in the fact that students may take up to half their courses in other departments of their choice. Students work in languages other than English, and their study may include work in a non-literary discipline. The COL1000H Faculty Seminar provides a basis for study in the program. All incoming students take this seminar course where they consider core theoretical problems of comparison.

All incoming students meet with the Graduate Coordinator to discuss their program and to decide on their course of study before beginning classes.

Minimum Admission Requirements

- General Regulations of the School of Graduate Studies, provided that applicants also satisfy the Centre for Comparative Literature's requirements stated below. In all cases, programs of study must be approved by the centre.
- An appropriate bachelor’s degree from a recognized university that includes courses in literature and languages with an average grade equivalent to at least a University of Toronto B+ in the applicant’s overall program.
- Demonstrated experience in the study of two literatures (or in comparative literature and one national literature) at the undergraduate level and an ability to work at the graduate level in at least one language other than English.
- All applicants must register as full-time students.

Program Requirements

- Students admitted to the MA must successfully complete at least 4.0 full-course equivalents (FCEs) including:
  - COL1000H Faculty Seminar (0.5 FCE)
  - at least 1.5 FCEs in COL courses.
- Students may pursue independent research for credit equivalent to 0.5 FCE at the MA level, under the direction of an advisor approved by the Centre for Comparative Literature.
- A plan of study is defined by each MA student through consultation with the Associate Director in light of the student’s particular areas of interest and background. This plan of study is subject to the approval of the Centre for Comparative Literature. In addition to the numerous courses in literary theory, methodology, and interdisciplinary topics offered by the centre, courses may also be selected from departments of language and literature, as well as from other units in the humanities.
- Average of at least B+ in coursework.
- MA students who intend to pursue doctoral studies are strongly advised to make appropriate plans for the acquisition of graduate level competence in a second language and literature other than English. An adequate reading knowledge of this second language must be demonstrated before the MA is received.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Comparative Literature: Comparative Literature PhD

Doctor of Philosophy

Program Description

The Comparative Literature PhD program accommodates a diverse range of students’ interests united by a shared concern for comparative issues. The interdisciplinary and transnational character of the program is reflected in the fact that students may take up to approximately half their courses in other departments of their choice. Students work in at least two languages other than English, and their study may include work in a non-literary discipline.

All incoming students meet with the Associate Director to discuss their program and to decide on their course of study before beginning classes.

The Centre for Comparative Literature only provides supervision in areas which fall within the competency, interests, or availability of its graduate faculty. The Centre supports research which engages creative practice with humanities-based theory.
and scholarship. Prospective students with an existing creative practice who are interested in using research creation methods are encouraged to contact the Associate Director to discuss the variety of projects that can be supported. Fields of research creation may include, but are not limited to: architecture, design, creative writing, visual arts, performance, film, video, interdisciplinary arts, media and electronic arts, and new artistic practices (including experiments with the hard and social sciences). The Centre does not provide studio space or production facilities.

**PhD Program**

**Minimum Admission Requirements**

- General Regulations of the School of Graduate Studies, provided that applicants also satisfy the Centre for Comparative Literature’s requirements stated below. In all cases, programs of study must be approved by the Centre.
- An appropriate master's degree with an average grade of at least A–. Normally, the master's degree will be in comparative literature; however, students with a master's degree in a humanities discipline involving literary studies, especially specific language and literature programs, will also be considered. Demonstrated ability to do advanced research in two languages and literatures other than English.
- Applicants, including those from the University of Toronto, must arrange for recommendations from two referees; must submit a statement of purpose of approximately 500 words; and must submit a sample of written work, preferably a short essay on a literary topic.
- The Centre welcomes applications from people with an established creative practice who would like to incorporate creative research methodologies into their dissertation work. Applicants who are interested in doing so must have the required expertise and resources to carry out the proposed creative work. Their letter of intent must 1) describe the type of creative research practice they intend to pursue so the Centre can determine whether it can provide appropriate supervisory and committee support. The applicant must 2) direct at least one reference letter writer to testify to the applicant’s competency in the relevant creative practice, and the applicant must 3) articulate how the creative practice may be employed as a method for elucidating critical questions animating the dissertation project.

**Program Requirements**

- A student with an MA in Comparative Literature or its equivalent must take at least 3.0 full-course equivalents (FCEs), of which a minimum of 2.0 FCEs must be COL courses. A student who has an MA in a humanities discipline involving literary studies, especially specific language and literature programs, may be required to take more courses. The actual number of courses required for the PhD will be established at the time of admission through consultation with the Director/Associate Director.
- Students may pursue independent research for credit equivalent to 0.5 FCE at the PhD level, under the direction of an advisor approved by the Centre.
- Students define the scope and approach of their plan of study in consultation with the Associate Director and other faculty. During the first two years of the program, students complete coursework, language requirements, and prepare for the field examination. Coursework must be completed within the first two years of the PhD program. Students constitute a field examination/ supervisory committee and submit a dissertation proposal no later than the end of Year 2 of PhD study. The field examination is taken ideally no later than the end of the first session of Year 3.
- Students must demonstrate an ability to work at the graduate level in two languages and literatures other than English. An adequate reading knowledge of a third language other than English must be demonstrated before taking the field examination. For this last requirement, it is possible to substitute competency in a non-literary discipline. The Centre reserves the right to determine whether a student has met this requirement. Typically, it will be two graduate half courses. Certification of graduate-level competence and reading knowledge in languages is given to all students who qualify.
- All PhD students are required to take their field examination by the end of the Spring session of Year 3 of the program. The examination consists of both a field paper and an oral component.
  - The field paper is a 30-page critical essay based on the candidate’s reading list that assesses the current state of research and delineates issues and questions pertinent to the thesis. The field paper must be submitted two to three weeks prior to the oral field exam.
  - The oral part of the examination begins with a textual explication by the student, no more than 30 minutes in length, of a specific passage or poem from a work in the primary reading list, assigned for preparation at least three days in advance. For the presentation, only notes or a general outline may be used. The rest of the examination usually consists of questions concerning the student’s commentary on the text, the written field paper, the reading list of the original field proposal, and/or other aspects of the field. The oral exam lasts for two hours.
  - In the event of failure, the student will be given one more chance to take the exam within one year. Failure after two attempts will lead to the termination of the student’s registration.
  - When the field examination has been completed successfully, the candidate will prepare and defend a dissertation which must be an original and significant contribution to the existing body of knowledge. This dissertation may include a creative research component.
  - Students' progress will be assessed at least once a year by the Centre’s Graduate Academic Committee and/or their respective supervisory committees. Although the program has been designed for completion in four years, some students may require a longer period to complete all of the requirements.
  - The student must be geographically available, visit the campus regularly, and must register as a full-time student. In addition, a full-time student is not permitted to be absent from the University for an extended period or to participate in a program offered by another university without the explicit written permission of the Centre for Comparative Literature.
Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- General Regulations of the School of Graduate Studies, provided that applicants also satisfy the Centre for Comparative Literature’s requirements stated below. In all cases, programs of study must be approved by the Centre.
- Students coming directly out of an appropriate undergraduate program (direct-entry) who have a demonstrated, exceptional ability to undertake advanced research in two languages and literatures other than English may be considered for direct admission into the PhD program.
- Applicants, including those from the University of Toronto, must arrange for recommendations from two referees; must submit a letter of intent not exceeding 500 words; and must submit a sample of written work, preferably a short essay on a literary topic.
- The Centre welcomes applications from people with an established creative practice who would like to incorporate creative research methodologies into their dissertation work. Applicants who are interested in doing so must have the required expertise and resources to carry out the proposed creative work. Their letter of intent must 1) describe the type of creative research practice they intend to pursue so the Centre can determine whether it can provide appropriate supervisory and committee support. The applicant must 2) direct at least one reference letter writer to testify to the applicant’s competency in the relevant creative practice, and the applicant must 3) articulate how the creative practice may be employed as a method for elucidating critical questions animating the dissertation project.

Program Requirements

- A student with a bachelor’s degree who is admitted directly to the PhD program must take at least 6.0 full-course equivalents (FCEs), of which 3.0 must be COL courses. The actual number of courses required for the PhD will be established at the time of admission through consultation with the Director/Associate Director.
- Students may pursue independent research for credit equivalent to 0.5 FCE at the PhD level, under the direction of an advisor approved by the Centre.
- Students define the scope and approach of their plan of study in consultation with the Associate Director and other faculty. During the first two years of the program, students complete coursework, language requirements, and prepare for the field examination. Coursework must be completed within the first two years of the PhD program. Students constitute a field examination/ supervisory committee and submit a dissertation proposal no later than the end of Year 2 of PhD study. The field examination is taken ideally no later than the end of the first session of Year 3.
- Students must demonstrate an ability to work at the graduate level in two languages and literatures other than English. An adequate reading knowledge of a third language other than English must be demonstrated before taking the field examination. For this last requirement, it is possible to substitute competency in a non-literary discipline. The Centre reserves the right to determine whether a student has met this requirement. Typically, it will be two graduate half courses. Certification of graduate-level competence and reading knowledge in languages is given to all students who qualify.
- All PhD students are required to take their field examination by the end of the Spring session of Year 3 of the program. The examination consists of both a field paper and an oral component.
  - The field paper is a 30-page critical essay based on the candidate’s reading list that assesses the current state of research and delineates issues and questions pertinent to the thesis. The field paper must be submitted two to three weeks prior to the oral field exam.
  - The oral part of the examination begins with a textual explication by the student, no more than 30 minutes in length, of a specific passage or poem from a work in the primary reading list, assigned for preparation at least three days in advance. For the presentation, only notes or a general outline may be used. The rest of the examination usually consists of questions concerning the student’s commentary on the text, the written field paper, the reading list of the original field proposal, and/or other aspects of the field. The oral exam lasts for two hours.
  - In the event of failure, the student will be given one more chance to take the exam within one year. Failure after two attempts will lead to the termination of the student’s registration.
- When the field examination has been completed successfully, the candidate will prepare and defend a dissertation which must be an original and significant contribution to the existing body of knowledge. This dissertation may include a creative research component.
- Students’ progress will be assessed at least once a year by the Centre’s Graduate Academic Committee and/or their respective supervisory committees.
- The student must be geographically available, visit the campus regularly, and must register as a full-time student. In addition, a full-time student is not permitted to be absent from the University for an extended period or to participate in a program offered by another university without the explicit written permission of the Centre for Comparative Literature.

Program Length

5 years

Time Limit

7 years
## Comparative Literature: Comparative Literature MA, PhD Courses

Students should consult the [Comparative Literature website](#) for courses that may be taken for credit.

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<th>Course Code</th>
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<td>Faculty Seminar</td>
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<td>COL1900H</td>
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<tr>
<td>COL2100H</td>
<td>Special Topics Course</td>
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<td>COL4000Y</td>
<td>Practicum on Research and Bibliography in Comparative Literature</td>
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<tr>
<td>COL5012H</td>
<td>How Aesthetics was Made a Science: Readings in Czech and Russian</td>
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<td>Dramatic Text and Theoretical Communication: Bertolt Brecht, Robert Lepage, and Robert Wilson</td>
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<td>COL5018H</td>
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<td>COL5027H</td>
<td>Memory, Trauma, and History</td>
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<tr>
<td>COL5032H</td>
<td>Feminist Approaches to Medieval Literature</td>
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<td>COL5033H</td>
<td>Visual Portraiture in Contemporary Autobiographical Narratives</td>
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<td>COL5037H</td>
<td>Magic Prague: Questions of Literary Cityspaces</td>
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<td>COL5047H</td>
<td>The Two Avant-Gardes</td>
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<td>COL5052H</td>
<td>Marxism and Form</td>
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<td>COL5062H</td>
<td>Prague School Semiotics of Drama, Theater, and Cinema in Contemporary Context</td>
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<td>COL5086H</td>
<td>Literature, Culture, and Contact in Medieval Iberia</td>
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<td>COL5090H</td>
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<td>COL5095H</td>
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<td>COL5096H</td>
<td>The Problem of Translation: Historical, Theoretical, and Pragmatic Perspectives</td>
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<td>COL5101H</td>
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<td>Post-Capitalist Fantasy: Culture, Politics, Subjectivity</td>
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<td>JFC5105H</td>
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<td>Performative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials</td>
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<td>JHL1680H</td>
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<td>JOS5029H</td>
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Computer Science

Computer Science: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Applied Computing

MScAC

- Concentrations:
  - Applied Mathematics;
  - Data Science;
  - Quantum Computing

Computer Science

MSc and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Genome Biology and Bioinformatics
  - Computer Science, MSc, PhD

- Knowledge Media Design
  - Computer Science, MSc, PhD

- Neuroscience
  - Computer Science, MSc, PhD

Overview

Graduate faculty in the Department of Computer Science are interested in a wide range of subjects related to computing, including programming languages and methodology, software engineering, operating systems, compilers, distributed computation, networks, numerical analysis and scientific computing, financial computation, data structures, algorithm design and analysis, computational complexity, cryptography, combinatorics, graph theory, artificial intelligence, neural networks, knowledge representation, computational linguistics, computer vision, robotics, database systems, graphics, animation, interactive computing, and human-computer interaction.

For further details, consult the graduate student handbook prepared by the department and available online.

Contact and Address

MSc and PhD Programs

Web: web.cs.toronto.edu
Email: gradapplications@cs.toronto.edu
Telephone: (416) 978-8762

Department of Computer Science Graduate Office
University of Toronto
Bahen Centre for Information Technology
40 St. George Street
Toronto, Ontario M5S 2E4
Canada

MScAC Program

Web: mscac.utoronto.ca
Email: mscac@cs.toronto.edu
Telephone: (416) 978-5180

University of Toronto
700 University Avenue, 9th Floor
Toronto, ON M5G 1Z5
Canada

Computer Science: Graduate Faculty

Full Members

Abdelrahman, Tarek - BSc, MSc, PhD
Ahmed, Ishtiaque - PhD
Amza, Cristiana - BS, MS, PhD
Aspuru-Guzik, Alan - PhD
Ba, Jimmy - PhD, PhD, PhD
Bacchus, Fähiem - BS, SM, PhD
Balakrishnan, Ravin - BS, SM, PhD
Beck, Chris - BSc, MSc, PhD
Bonner, Anthony - BSc, MSc, PhD
Borodin, Allan - BS, SM, PhD, FAAS
Brudno, Michael - AB, SM, PhD
Burgner-Kahrs, Jessica - PhD
Chechik, Marsha - BS, SM, PhD (Chair and Graduate Chair)
Chevalier, Fanny - PhD
Christara, Christina - BS, SM, PhD
de Lara, Eyal - BS, MS, PhD
Demke Brown, Angela - BS, SM, PhD
Dickinson, Sven Josef - BASc, MS, PhD
Duvenaud, David - PhD
Easterbrook, Steve - BSc, PhD
Ellen, Faith - BM, MMath, PhD
Erdogdu, Murat Anil - PhD
Fairgrieve, Thomas - BMath, MSc, PhD
Farzan, Azadeh - BS, PhD
Fidler, Sanja - PhD
Fleet, David James - BS, MS, PhD
Fox, Mark - BSc, PhD
Frey, Brendan - BSc, MSc, PhD
Ganjali, Yashar - BSc, MSc, PhD
Garg, Animesh - BE, MS, MS, PhD
Ghassemi, Marzyeh - PhD
Goel, Ashvin - BTech, MS, PhD
Grinspun, Elfan - PhD
Grosse, Roger - PhD
Grossman, Tovi - PhD
Gruninger, Michael - BSc, MS, PhD
Gupta, Arvind - BSc, PhD
Hadjilacos, Vassos - BSE, PhD
Hirst, Graeme - BA, BSc, MSc, PhD (Associate Chair, Graduate Studies)
Jacobsen, Hans-Arno - MCS, PhD
Jacobson, Alec - PhD
Jepson, Allan - BSc, PhD
Jurisica, Igor - PhD, CRC
Koudas, Nick - BS, MS, PhD
Kutulakos, Kiaikos - BS, MSc, PhD
Levin, David - PhD
Li, Baochun - BEng, MSc, DPhil
Lie, David - BASc, MS, PhD
Liebeherr, Jorg - DipIng, PhD
Long, Fan - PhD
Marbach, Peter Josef - DipIng, MS, PhD
Miliakis, Alexander - PhD
McIlraith, Sheila - BSc, MSc, PhD
Mehri Dehnav, Maryam - PhD
Mihailidis, Alex - BASc, MSc, PhD
Molloy, Michael - BMath, MMath, PhD
Morris, Quaid - BS, PhD
Moses, Alan - BA, PhD
Penn, Gerald - BS, MSc, PhD
Pitassi, Toniann - BS, SM, PhD
Rudzicz, Frank - PhD
Schroeder, Bianca - MSc, PhD
Shkurti, Florian - BSc, MSc
Singh, Karan - BS, MS, PhD
Soden, Robert - PhD
Stevenson, Suzanne Ava - MS, PhD
Stumm, Michael - MS, PhD
Sun, Yu - BS, MS, MS, PhD
Taati, Babak - PhD
Toueg, Sam - BS, MA, MSEE, PhD
Truong, Khai Nhu - BSc, PhD
Urtasun, Raquel - PhD
Veneris, Andreas - BSc, MSc, PhD
Vijaykumar, Nandita - BE, ME
Wiebe, Nathan - PhD
Wigdor, Daniel - PhD
Williams, Joseph - PhD
Yuan, Ding - PhD

Associate Members
Armstrong, Blair - BASc, MA, PhD
Beekhuizen, Barend - BA, MA, PhD
Campbell, Jennifer - BSc, MMath
Campbell, Kieran - PhD
Craig, Michelle - BSc, MSc
Engels, Steven - BASc, MMath
Gabel, Moshe - BSc, MSc, PhD
Gries, Paul - BA, MSc
Heap, Daniel - BS, MSc
Hoffman, Michael - PhD
Horton, Diane - BS, MSc
Huang, Huaxiong - BSc, PhD
Kahrs, Lueder Alexander - MSc, PhD
Kelly, Jonathan - BSc, MS, MSc, PhD
Kim, Philip - BS, PhD
Kreinin, Alexander - MSc, PhD
Lee, Annie - PhD
McIntosh, Chris - PhD
Papernot, Nicolas - BS, MSc, PhD
Papyan, Vardan - BSc, MSc, PhD
Reid, Karen - BS, MB, MS
Rossman, Benjamin - BA, MA, PhD
Sanner, Scott - BCS, BCS, PhD
Tsootsos, John - BASc, MSc, PhD, CRC
Wang, Bo - BS, MS, PhD

Computer Science: Applied Computing

Master of Science in Applied Computing

Program Description

The MScAC program is offered as a general Computer Science program (i.e., no concentration) or as a concentration in Applied Mathematics, Data Science, or Quantum Computing.

The Applied Mathematics concentration is offered jointly by the Department of Computer Science and the Department of Mathematics. The Data Science concentration is offered jointly by the Department of Computer Science and the Department of Statistical Sciences. The Quantum Computing concentration is offered jointly by the Department of Computer Science and the Department of Physics.

MScAC General Program (No Concentration)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science’s additional admission requirements stated below.
• An appropriate bachelor's degree from a recognized university in computer science or a related discipline.
• A standing equivalent to at least B+ in the final year of undergraduate studies.
• Applicants whose primary language is not English and who have graduated from a university where the primary language of instruction is not English must submit results of the Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) with the following minimum scores:
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.
  - IELTS: an overall score of 7.0, with at least 6.5 for each component.
• If students complete a portion of their degree in English, or part of their degree at another university where English is the language of instruction, applicants must still provide proof of English-language proficiency.
• Three letters of support from faculty and/or employers.
• A statement of purpose explaining the applicant's interest in computer science and objectives for the program.

Program Requirements

• **Coursework.** Students must successfully complete a total of 3.0 full-course equivalents (FCEs) including:
  - 1.0 FCE in required courses: technical communications (CSC2701H) and technical entrepreneurship (CSC2702H).
  - An eight-month industrial internship, CSC2703H (3.5 FCEs). The internship is coordinated by the department and evaluated on a pass/fail basis.
• There is no thesis requirement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

MScAC Program (Applied Mathematics Concentration)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
• An appropriate bachelor's degree from a recognized university in a related area such as applied mathematics, mathematics, physics, computational mathematics, statistics, computer science, or any discipline where there is a significant quantitative and/or mathematical component. The completed bachelor's degree must include significant exposure to advanced mathematics, statistics, and computer science, including coursework in advanced and multivariate calculus (preferably analysis), linear algebra, probability and statistics, programming languages, and general computational methods.
• A standing equivalent to at least B+ in the final year of undergraduate studies.
• Applicants whose primary language is not English and who have graduated from a university where the primary language of instruction is not English must submit results of the Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) with the following minimum scores:
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.
  - IELTS: an overall score of 7.0, with at least 6.5 for each component.
• If students complete a portion of their degree in English, or part of their degree at another university where English is the language of instruction, applicants must still provide proof of English-language proficiency.
• Three letters of reference from faculty and/or employers, with preference for at least one such letter from a faculty member in Mathematics or Applied Mathematics.
• A statement of purpose explaining the applicant's interest in applied mathematics and objectives for the program.
• Applicants must indicate a preference for the concentration in Applied Mathematics in their application. Admission is competitive, and students who are admitted into the MScAC program are not automatically admitted to this concentration upon request.
• There is no thesis requirement.

Program Requirements

• **Coursework.** Completion of 3.0 full-course equivalents (FCEs) including:
  - 1.0 FCE chosen from the MAT 1000-level courses or higher. This may include courses cross-listed as APM400 level.
  - 1.0 FCE chosen from the Computer Science (CSC course designator) graduate course listings.
  - 1.0 FCE in required courses:
    - CSC2701H Communication for Computer Scientists (0.5 FCE) and
    - CSC2702H Technical Entrepreneurship (0.5 FCE).
  - Course selections should be made in consultation with the Program Director.
• An eight-month industrial internship, CSC2703H (3.5 FCEs). The internship is coordinated by the department and evaluated on a pass/fail basis.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time
MScAC Program (Data Science Concentration)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in a related area such as statistics, computer science, mathematics, or any discipline where there is a significant quantitative component. The completed bachelor’s degree must include significant exposure to statistics, computer science, and mathematics, including coursework in advanced calculus, linear algebra, probability and statistics, programming languages, and computational methods.
- A standing equivalent to at least B+ in the final year of undergraduate studies.
- Applicants whose primary language is not English and who have graduated from a university where the primary language of instruction is not English must submit results of the Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) with the following minimum scores:
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.
  - IELTS: an overall score of 7.0, with at least 6.5 for each component.
- If students complete a portion of their degree in English, or part of their degree at another university where English is the language of instruction, applicants must still provide proof of English-language proficiency.
- Three letters of reference from faculty and/or employers.
- A statement of purpose explaining the applicant's interest in data science and objectives for the program.
- Applicants must indicate a preference for the concentration in Data Science in their application. Admission is competitive, and students who are admitted to the MScAC program are not automatically admitted to this concentration upon request.

Program Requirements

- **Coursework.** Completion of 3.0 full-course equivalents (FCEs) including:
  - 1.0 FCE chosen from the STA 2000-level courses or higher. This may include a maximum of 0.5 FCE chosen from the STA 4500-level of six-week modular courses (0.25 FCE each).
  - 1.0 FCE chosen from the Computer Science (CSC course designator) graduate course listings.
  - 1.0 FCE in required courses:
    - CSC2701H Communication for Computer Scientists (0.5 FCE) and
    - CSC2702H Technical Entrepreneurship (0.5 FCE).
  - Course selection should be made in consultation with the Program Director.

- An eight-month industrial **internship**, CSC2703H (3.5 FCEs). The internship is coordinated by the department and evaluated on a pass/fail basis.
- There is no thesis requirement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

MScAC Program (Quantum Computing Concentration)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university in a related area such as physics, computer science, mathematics, or any discipline where there is a significant quantitative component. The completed bachelor’s degree must include significant exposure to physics, computer science, and mathematics, including coursework in advanced quantum mechanics, multivariate calculus, linear algebra, probability and statistics, programming languages, and computational methods.
- A standing equivalent to at least B+ in the final year of undergraduate studies.
- Applicants whose primary language is not English and who have graduated from a university where the primary language of instruction is not English must submit results of the Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) with the following minimum scores:
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.
  - IELTS: an overall score of 7.0, with at least 6.5 for each component.
- If students complete a portion of their degree in English, or part of their degree at another university where English is the language of instruction, applicants must still provide proof of English-language proficiency.
- Three letters of reference from faculty and/or employers.
- A statement of purpose explaining the applicant's interest in quantum computing and objectives for the program.
- Applicants must indicate a preference for the concentration in Quantum Computing in their application. Admission is competitive, and students who are admitted to the MScAC program are not automatically admitted to this concentration upon request.

Program Requirements

- **Coursework.** Completion of 3.0 full-course equivalents (FCEs) as follows:
1.0 FCE chosen from the Physics (PHY course designator) graduate course listings. Of eligible courses, the following are examples that are particularly relevant to the Quantum Computing concentration:

- PHY1500H Statistical Mechanics (0.5 FCE)
- PHY1520H Quantum Mechanics (0.5 FCE)
- PHY1610H Scientific Computing for Physicists (0.5 FCE)
- PHY2203H Quantum Optics I (0.5 FCE)
- PHY2204H Quantum Optics II (0.5 FCE)
- PHY2211H Quantum Information Theory (0.5 FCE)
- PHY2212H Entanglement Physics (0.5 FCE)

1.0 FCE chosen from the Computer Science (CSC course designator) graduate course listings. Of eligible courses, the following are examples that are particularly relevant to the Quantum Computing concentration:

- CSC2305H Numerical Methods for Optimization Problems (0.5 FCE)
- CSC2414H Topics in Applied Discrete Mathematics (0.5 FCE)
- CSC2421H Topics in Algorithms (0.5 FCE)
- CSC2451H Quantum Computing, Foundations to Frontier (0.5 FCE)

1.0 FCE in required courses:

- CSC2701H Communication for Computer Scientists (0.5 FCE)
- CSC2702H Technical Entrepreneurship (0.5 FCE)

Course selections should be made in consultation with the Program Director. Appropriate substitutions may be possible with approval.

- An eight-month industrial internship, CSC2703H (3.5 FCEs). The internship is coordinated by the department and evaluated on a pass/fail basis.
- There is no thesis requirement.

Program Length
4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit
3 years full-time

Computer Science: Computer Science MSc

Master of Science

Program Description

The MSc degree program is designed for students seeking to be trained as a researcher capable of creating original, internationally recognized research in computer science.

Computer Science courses are classified by Methodologies and Research Areas based on their content. Methodologies are core problem-solving approaches and/or techniques and general tools emphasized in the course material, while Research Areas are aligned with the activities of the various research groups in the department.

The MSc program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
- An appropriate bachelor's degree with a standing equivalent to at least a University of Toronto B+.
- Preference given to applicants who have studied computer science or a closely related discipline.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must achieve a Test of English as a Foreign Language (TOEFL) score of at least 580 on the paper-based test and 4 on the Test of Written English (TWE); 93/120 on the Internet-based test and 22/30 on the writing and speaking sections.

Program Requirements

- Coursework. Completion of 2.0 graduate full-course equivalents (FCEs) in computer science. The courses must satisfy breadth in three of the four different Methodologies of Computer Science to ensure that MSc graduates have a breadth of skills for research and problem solving throughout their careers.
- A major research paper (CSC4000Y; 1.0 FCE) demonstrating the student's ability to do independent work in organizing existing concepts and in suggesting and developing new approaches to solving problems in a research area. The standard for this paper is that it could reasonably be submitted for peer-reviewed publication.

Program Length
4 sessions full-time (typical registration sequence: F/W/S/F);
8 sessions part-time

Time Limit
3 years full-time;
6 years part-time

Computer Science: Computer Science PhD

Doctor of Philosophy

Program Description

The PhD degree program is designed for students seeking to be trained as a researcher capable of creating original, internationally recognized research in computer science.

Research conducted under the supervision of a faculty member will constitute a significant and original contribution to computer science.
Computer Science courses are classified by Methodologies and Research Areas based on their content. Methodologies are core problem-solving approaches and/or techniques and general tools emphasized in the course material, while Research Areas are aligned with the activities of the various research groups in the department.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry following completion of a bachelor’s degree.

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
- Successful completion of an appropriate master’s degree with a standing equivalent to at least a University of Toronto B+. Preference is given to applicants who have studied computer science or a closely related discipline.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must achieve a Test of English as a Foreign Language (TOEFL) score of at least 580 on the paper-based test and 4 on the Test of Written English (TWE); 93/120 on the Internet-based test and 22/30 on the writing and speaking sections.

**Program Requirements**

- **Coursework.** Students must complete 2.0 full-course equivalents (FCEs) and a thesis.
- The courses must satisfy breadth in four different research areas of computer science to ensure a broad and well-balanced knowledge of computer science.
- Students must meet the department’s timeline for satisfactory progress as outlined in the PhD handbook.
- A meeting of the PhD supervisory committee must be held by the 16th month of the PhD program. This is typically the initial meeting with the supervisory committee and is referred to as the qualifying oral examination. After the qualifying oral, the student's PhD supervisory committee must meet at least once annually. The student must have their thesis topic approved at a PhD supervisory committee meeting within the time frame for achieving candidacy. The departmental thesis defense must be passed before the SGS Final Oral Examination can be scheduled.

**Program Length**

4 years

**Time Limit**

6 years

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**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Computer Science's additional admission requirements stated below.
- In exceptional circumstances, applicants may be admitted to this program directly from a bachelor’s degree with a standing equivalent to at least a University of Toronto A–. Preference is given to applicants who have studied computer science or a closely related discipline.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must achieve a Test of English as a Foreign Language (TOEFL) score of at least 580 on the paper-based test and 4 on the Test of Written English (TWE); 93/120 on the Internet-based test and 22/30 on the writing and speaking sections.

**Program Requirements**

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) and a thesis.
- The courses must satisfy breadth in four different research areas and three different methodologies of computer science to ensure a broad and well-balanced knowledge of computer science.
- Students must meet the department's timeline for satisfactory progress as outlined in the PhD handbook.
- A meeting of the PhD supervisory committee must be held by the 16th month of the PhD program. This is typically the initial meeting with the supervisory committee and is referred to as the qualifying oral examination. After the qualifying oral, the student's PhD supervisory committee must meet at least once annually. The student must have their thesis topic approved at a PhD supervisory committee meeting within the time frame for achieving candidacy. The departmental thesis defense must be passed before the SGS Final Oral Examination can be scheduled.

**Program Length**

5 years

**Time Limit**

7 years

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Computer Science: Computer Science
MScAC, MSc, PhD Courses

Not all courses are offered every year. Please consult the department for course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CSC2104H</td>
<td>Formal Methods of Program Design</td>
</tr>
<tr>
<td>CSC2107H</td>
<td>Compilers and Interpreters</td>
</tr>
<tr>
<td>CSC2108H</td>
<td>Automated Verification</td>
</tr>
<tr>
<td>CSC2125H</td>
<td>Algorithmic Program Verification</td>
</tr>
<tr>
<td>CSC2206H</td>
<td>Computer Systems Modelling</td>
</tr>
<tr>
<td>CSC2208H</td>
<td>Advanced Operating Systems</td>
</tr>
<tr>
<td>CSC2209H</td>
<td>Computer Networks</td>
</tr>
<tr>
<td>CSC2221H</td>
<td>Introduction to Distributed Computing</td>
</tr>
<tr>
<td>CSC2222H</td>
<td>Applications of Parallel and Distributed Computing</td>
</tr>
<tr>
<td>CSC2224H</td>
<td>Parallel Computer Architecture and Programming</td>
</tr>
<tr>
<td>CSC2226H</td>
<td>Topics in Verification</td>
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<tr>
<td>CSC2227H</td>
<td>Topics in the Design and Implementation of Operating Systems</td>
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<tr>
<td>CSC2228H</td>
<td>Topics in Mobile, Pervasive, and Cloud Computing</td>
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<td>CSC2231H</td>
<td>Topics in Computer Systems</td>
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<td>CSC2233H</td>
<td>Topics in Storage Systems</td>
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<td>CSC2305H</td>
<td>Numerical Methods for Optimization Problems</td>
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<td>CSC2306H</td>
<td>High Performance Scientific Computing</td>
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<td>CSC2310H</td>
<td>Computational Methods for Partial Differential Equations</td>
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<td>CSC2321H</td>
<td>Matrix Calculations</td>
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<td>CSC2326H</td>
<td>Topics in Numerical Analysis</td>
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<td>CSC2401H</td>
<td>Introduction to Computational Complexity</td>
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<td>CSC2404H</td>
<td>Computability and Logic</td>
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<td>CSC2405H</td>
<td>Automata Theory</td>
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<td>CSC2410H</td>
<td>Introduction to Graph Theory</td>
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<td>CSC2412H</td>
<td>Algorithms for Private Data Analysis (Prerequisite: CSC 373 or equivalent, or permission of the instructor.)</td>
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<td>CSC2414H</td>
<td>Topics in Applied Discrete Mathematics</td>
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<td>CSC2415H</td>
<td>Advanced Topics in the Theory of Distributed Computing</td>
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<td>CSC2416H</td>
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<td>CSC2417H</td>
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<td>CSC2419H Topics in Cryptography</td>
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<td>CSC2420H Algorithm Design, Analysis, and Theory</td>
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<td>CSC2426H Fundamentals of Cryptography</td>
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<td>CSC2429H Topics in the Theory of Computation</td>
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<td>CSC2431H Topics in Computational Molecular Biology</td>
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<td>CSC2451H Quantum Computing, Foundations to Frontier (Exclusion: MAT1751H Quantum Computing, Foundations to Frontier.)</td>
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<td>CSC2501H Computational Linguistics</td>
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<td>CSC2502H Knowledge Representation and Reasoning</td>
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<td>CSC2503H Foundations of Computer Vision</td>
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<td>CSC2504H Computer Graphics</td>
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<td>CSC2506H Probabilistic Learning and Reasoning</td>
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<td>CSC2508H Advanced Management Systems</td>
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<td>CSC2510H Topics in Information Systems</td>
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<td>CSC2511H Natural Language Computing</td>
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<td>CSC2512H Constraint Satisfaction Problems</td>
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<td>CSC2513H Critical Thinking for Human Computer Interaction (Prerequisite: CSC 318 or equivalent, or permission of the instructor.)</td>
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<td>CSC2514H Human-Computer Interaction</td>
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<td>CSC2515H Introduction to Machine Learning</td>
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<td>CSC2516H Neural Networks and Deep Learning</td>
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<td>CSC2518H Spoken Language Processing</td>
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<td>CSC2520H Geometry Processing</td>
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<td>CSC2523H Object Modelling and Recognition</td>
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<td>CSC2524H Topics in Interactive Computing</td>
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<td>CSC2525H Research Topics in Database Management</td>
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<td>CSC2526H HCI: Topics in Ubiquitous Computing</td>
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<td>CSC2527H The Business of Software</td>
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<td>CSC2528H Advanced Computational Linguistics</td>
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<td>CSC2530H Computer Vision for Advanced Digital Photography</td>
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<td>CSC2532H Statistical Learning Theory (Prerequisite: CSC2515H.)</td>
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<td>CSC2533H Foundations of Knowledge Representation</td>
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<td>CSC2534H Decision Making Under Uncertainty</td>
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<td>CSC2536H</td>
<td>Topics in Computer Science and Education</td>
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<td>CSC2537H</td>
<td>Information Visualization</td>
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<td>CSC2539H</td>
<td>Topics in Computer Vision</td>
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<td>CSC2540H</td>
<td>Computational Cognitive Models of Language</td>
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<td>CSC2541H</td>
<td>Topics in Machine Learning</td>
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<td>CSC2542H</td>
<td>Topics in Knowledge Representation and Reasoning</td>
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<td>CSC2546H</td>
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<td>CSC2547H</td>
<td>Current Algorithms and Techniques in Machine Learning</td>
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<td>CSC2548H</td>
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<td>CSC2549H</td>
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<td>CSC2552H</td>
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<td>CSC2556H</td>
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<td>CSC2560H</td>
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<td>CSC2564H</td>
<td>Topics in Human-Centred and Interdisciplinary Computing</td>
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<td>CSC2606H</td>
<td>Introduction to Continuum Robotics (Prerequisite: Introduction to Robotics; e.g, CSC376 offered at UTM or AER525. Exclusion: CSC476 offered at UTM.)</td>
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<td>CSC2611H</td>
<td>Computational Models of Semantic Change</td>
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<td>CSC2612H</td>
<td>Computing and Global Development (Prerequisite: CSC 318 or equivalent, or permission of the instructor.)</td>
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<tr>
<td>CSC2621H</td>
<td>Topics in Robotics (Prerequisite: CSC411H or CSC2515H or ECE521H.)</td>
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<tr>
<td>CSC2626H</td>
<td>Imitation Learning for Robotics (Prerequisite: CSC411/2515 Machine Learning and Data Mining or ECE521 Inference Algorithms and Machine Learning or equivalent.)</td>
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<tr>
<td>CSC2699H</td>
<td>Special Reading Course in Computer Science</td>
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<td>CSC2701H</td>
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<td>CSC2720H</td>
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<td>CSC4000Y</td>
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<td>ECE1785H</td>
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</table>
Criminology and Sociolegal Studies

Criminology and Sociolegal Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Criminology and Sociolegal Studies

MA and PhD

Combined Degree Programs

• STG, Law, Juris Doctor / Criminology and Sociolegal Studies, MA
• STG, Law, Juris Doctor / Criminology and Sociolegal Studies, PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Addiction Studies
  • Criminology and Sociolegal Studies, MA, PhD
• Diaspora and Transnational Studies
  • Criminology and Sociolegal Studies, MA, PhD
• Sexual Diversity Studies
  • Criminology and Sociolegal Studies, MA, PhD
• Women and Gender Studies
  • Criminology and Sociolegal Studies, MA, PhD

Overview

The Centre for Criminology and Sociolegal Studies, founded in 1964, offers advanced interdisciplinary study in two closely related, overlapping areas: criminology and sociolegal studies.

MA graduates find employment in government (in areas such as child and youth services or addiction as well as criminal justice fields), in governmental organizations in the criminal justice field, in social science research, or in other positions for which a background in criminology and sociolegal studies is useful. Some choose to go to law school, and many have gone on to other post-graduate work, such as in criminology, sociology, law, and social work.

PhD graduates have mainly found employment in tenure-track positions, most often in sociology departments or in criminology programs. Both the MA and PhD degree programs are academic rather than professional/vocational.

Students enrolled in doctoral programs in other departments of the University of Toronto may apply to be appointed as Junior Fellows at the Centre for Criminology and Sociolegal Studies. The objective of the Junior Fellow Program is to involve doctoral students whose work overlaps with the research conducted at the Centre and to enhance the interdisciplinarity of the Centre. Junior Fellows have come from history, geography, law, and sociology. Exceptionally, doctoral students pursuing degrees at other universities but residing in Toronto may apply to be appointed as Visiting Junior Fellows.

Contact and Address

Web: www.crimsl.utoronto.ca
Email: crim.grad@utoronto.ca
Telephone: (416) 978-7124 ext. 225
Fax: (416) 978-4195

Centre for Criminology and Sociolegal Studies
University of Toronto
14 Queen's Park Crescent West
University of Toronto
Toronto, Ontario M5S 3K9
Canada

Criminology and Sociolegal Studies: Graduate Faculty

Full Members

Chen, Li - BA, MA, AM, JD, PhD
Chiao, Vincent - BA, PhD, JD
Clarke, Kamari - BA, MA, MPH, LLM, PhD
DeCelles, Katherine - BS, PhD
Dubber, Markus - AB, JD
Goodman, Philip - BA, MA, PhD
Hannah-Moffat, Kelly - BA, MA, PhD
Jauregui, Beatrice - BA, MA, PhD
Jausserani, Candace - BA, MA, MPH, PhD
Light, Matthew - BA, MA, JD, PhD
Macklin, Audrey - BSc, LLB, LLM, Chair in International Human Rights Law (Director)
Maurutto, Paula - DPhil
Phillips, James - LLB, MA, PhD
Roach, Kent - BA, LLB, LLM, The J. Robert S. Prichard and Ann E. Wilson Chair in Law and Public Policy
Tanner, Julian - DipEd, BSc, MA, PhD
Wortley, N. Scot - BA, MA, PhD

Members Emeriti

Doob, Anthony - AB, PhD, FRSC
Friedland, Martin - BCom, LLB, PhD
Gartner, Rosemary - BA, AA, MS, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Associate Members
Evans, Catherine - PhD
Laniyonu, Ayobami - BA, MA, PhD
Mitchell, Mary - BA, BA, JD, MA, MA, PhD, PhD
Taylor, Kerry - JD

Criminology and Sociolegal Studies: Criminology and Sociolegal Studies MA

Master of Arts

Program Description

The MA program encompasses two related disciplinary and interdisciplinary fields.

The first is criminology, which can be briefly defined as the study of all aspects of crime, including its definitions, causes, and intellectual genealogy, as well as the policy and institutional responses to it. Although criminology features some aspects of a separate discipline, including its own theoretical schools, journals, and university departments, it also draws heavily on related social science disciplines.

The field of sociolegal studies, also known as the law and society movement, is a related interdisciplinary research tradition that investigates a broad range of legal phenomena using the techniques and approaches of social science. Examples of such phenomena that the faculty have studied include citizenship and immigration policy, urban planning, and the regulation of alcohol and sex work.

The program is distinctive in that these bodies of knowledge are treated as closely related, and both of them are incorporated into the program of study. Broad intellectual exploration of these fields is incorporated by limiting the number of required courses and encouraging students to select courses (both in this and other graduate programs) that reflect their own intellectual and professional priorities. Likewise, students are given the option of meeting their degree requirements by completing eight taught half-courses or by completing six taught half-courses and writing a "master's research paper" that allows them to develop an independent research project under the supervision of a faculty member. While specialized professional or technical training meant to be directly transferable into criminal justice occupations is not provided, we welcome applications by criminal justice professionals who wish to pursue part-time studies.

The MA program enjoys an excellent national and international reputation, and graduates are sought by employers in both the public and private sectors who appreciate the theoretically and academically rigorous interdisciplinary social science training that is provided.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements of the Centre for Criminology and Sociolegal Studies stated below.
- Applicants must have an appropriate bachelor's degree from a recognized university. An appropriate bachelor's degree normally consists of 20 full-course equivalents (FCEs). Applicants with arts and science degrees will normally be required to have at least a B+ standing. Applicants from law schools who have already completed a JD degree or its equivalent will normally be required to have at least a B standing.
- Although many applicants to the MA program have some training in criminology or sociolegal studies, students from a variety of disciplinary and interdisciplinary backgrounds are welcomed. It would be advantageous for MA students in the program to have some familiarity with the approaches and methodologies associated with the social sciences. However, outstanding students from the humanities and behavioral and natural sciences will also be considered.
- The program can be completed on a full-time or part-time basis. All students will be required to complete the program within the time limits set for the MA degree under the General Regulations of the School of Graduate Studies. Students with professional experience who meet the academic admission requirements are encouraged to apply to the program.
- It is essential that all incoming graduate students have a command of English. Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English. This requirement must be satisfied using a Test of English as a Foreign Language (TOEFL) with a verbal and a written component. To be considered for admission, applicants must achieve the following minimum scores:
  - paper-based TOEFL exam: 580 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 93/120 and 22/30 on the writing and speaking sections.
- Official copies of these scores must be submitted to the University of Toronto before a formal offer of admission can be made.

Program Requirements

- MA students can complete the program in one of two ways:
  - by completing 4.0 full-course equivalents (FCEs) within 9 months or
  - by completing 3.0 FCEs and a research paper (CRI3360Y) within 12 months.
- The degree program includes compulsory and elective courses.
  - The compulsory course (0.5 FCE) is CRI2010H Methodological Issues in Criminology and Sociolegal Studies.
  - The elective courses allow students to engage in specialized study of different approaches to, and topics within, criminology and sociolegal studies. The elective courses offered may vary from year to year. In certain cases a student may, with the approval of the Graduate Coordinator, substitute a maximum of 1.5 FCEs from other graduate units in lieu of elective courses in criminology or sociolegal studies.
Criminology and Sociolegal Studies:
Criminology and Sociolegal Studies PhD

Doctor of Philosophy

Program Description

Similar to the MA program, the PhD program reflects the same emphasis on interdisciplinarity and flexibility, as well as an integrated, inclusive approach to criminology and sociolegal studies.

The primary mission of the doctoral program is to prepare future professional academics for a career in teaching and research; graduates hold faculty positions throughout Canada, in the United States, and around the world.

Over the years, PhD students have pursued dissertation projects on extremely varied research questions involving aspects of crime, criminal justice institutions, and a range of sociolegal topics. Regardless of their specific focus, they have found the Centre a supportive and interactive environment. The Centre promotes such collegiality by offering students shared office space in the Centre and encouraging them to work on site and participate in the lively intellectual life and shared scholarly activities. Likewise, although PhD students work closely with a primary supervisor, they also benefit from opportunities to learn from other core and cross-appointed faculty members. In short, the goal is to train broadly educated, thoughtful scholars with a research agenda in criminology or sociolegal studies.

Students are normally paired with a prospective supervisor at the time of admission. Therefore, applicants are encouraged to identify one or more possible supervisors, as well as possible dissertation committee members, and should indicate on their application whether they have made contact with particular core or cross-appointed members of the graduate faculty for these purposes.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Criminology and Sociolegal Studies’ additional admission requirements stated below.

- Applicants normally hold an MA degree in criminology or a cognate field, with a minimum A− standing or its equivalent from a recognized university. Students with MAs in disciplines unrelated to criminology or sociolegal studies may be required to take additional courses as part of their doctoral program.

- It is essential that all incoming graduate students have a command of English. Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. This requirement must be satisfied using a Test of English as a Foreign Language (TOEFL) with a verbal and a written component. To be considered for admission, applicants must achieve the following minimum scores:
  - paper-based TOEFL exam: 580 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 93/120 and 22/30 on the writing and speaking sections.

  Official copies of these scores must be submitted to the University of Toronto before a formal offer of admission can be made.

Program Requirements

- **Course requirements.** Students must complete a minimum of 2.0 full-course equivalents (FCEs) beyond those taken at the MA level. With approval of the Graduate Coordinator, a maximum of 1.5 FCEs of these may be from another graduate unit. Students must complete, at either the MA or the PhD level, the required research methods course (CRI2010H Methodological Issues in Criminology and Sociolegal Studies) and the required theory course (CRI1020H Law and State Power: Theoretical Perspectives). With the approval of the Graduate Coordinator, students can take a theory course offered through another graduate unit in lieu of CRI1020H. Students will normally complete all course requirements for the PhD in Year 1.

- **Professional development sequence.** Year 1 doctoral students will participate in CRI1010Y (Credit/No Credit; 0.0 FCE), a sequence of eight monthly workshop meetings of approximately two hours in length led by one or more faculty members and dedicated to discussion of a range of important issues in graduate professional development. Meetings will be scheduled at the beginning of the academic year, and attendance will be taken at each meeting. Students must normally attend at least six workshop meetings by the end of the second session of Year 1 to complete this requirement, and those who do not do so must make up the required sessions by the end of the second session of Year 2.

- **One comprehensive exam.** This exam must take the form of a major review paper. Students are required to read widely on a particular topic and identify and evaluate major theoretical debates and methodological issues. Students should provide an original, critical analysis of the literature and discuss possibilities for future work in their topic area. The comprehensive exam should normally be completed by the end of the second session of Year 2.

- **Language requirements.** Students must have an adequate knowledge of a language other than English if an additional language is deemed essential for satisfactory completion of research for the thesis.
• **Thesis.** PhD students must prepare an original thesis that is a significant contribution to knowledge in criminology or sociolegal studies. The thesis is a sustained piece of research written in an integrated series of chapters. The thesis is normally supervised by a member of the graduate faculty, with two other members of the graduate faculty serving on the thesis committee.

• **Residency.** PhD students are required to be on campus full-time for the period of their program, except for approved field research and academic exchanges. Students are expected to participate in the Centre’s activities associated with the program.

### Program Length

**4 years full-time**

### Time Limit

**6 years full-time**

### Criminology and Sociolegal Studies: Criminology and Sociolegal Studies MA, PhD Courses

All courses are half courses (0.5 FCE), with the exception of CRI3360Y\(^0\) *Research Paper* (1.0 FCE). Not all courses are offered every year. Consult the Centre for Criminology and Sociolegal Studies regarding course availability.

Due to space limitations, criminology graduate students will be given priority in graduate course enrolment. All other students must receive written permission from the instructor and the Graduate Coordinator before enrolling in any of the Centre’s graduate courses.

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CRI1010Y(^0)</td>
<td>Professional Development Workshops (Credit/No Credit)</td>
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<tr>
<td>CRI2010H</td>
<td>Methodological Issues in Criminology and Sociolegal Studies</td>
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#### Elective Courses

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CRI1020H</td>
<td>Law and State Power: Theoretical Perspectives</td>
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<tr>
<td>CRI1030H</td>
<td>Introduction to Science and Technology Studies: Sociolegal Approaches</td>
</tr>
<tr>
<td>CRI1050H</td>
<td>Transnationalism, Culture, and Power (TCP)</td>
</tr>
<tr>
<td>CRI2040H</td>
<td>Drugs and Crime</td>
</tr>
<tr>
<td>CRI2060H</td>
<td>Prisons and Punishment</td>
</tr>
<tr>
<td>CRI2120H</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>CRI2140H</td>
<td>Guilt, Responsibility, and Forensics</td>
</tr>
<tr>
<td>CRI2150H</td>
<td>Preventing Wrongful Convictions</td>
</tr>
<tr>
<td>CRI3020H</td>
<td>Criminology and the Policy-Making Process</td>
</tr>
<tr>
<td>CRI3110H</td>
<td>Qualitative Research Methods</td>
</tr>
<tr>
<td>CRI3120H</td>
<td>Politics and Crime</td>
</tr>
<tr>
<td>CRI3130H</td>
<td>Policing</td>
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<tr>
<td>CRI3140H</td>
<td>Special Topics in Criminology and Sociolegal Studies</td>
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<tr>
<td>CRI3146H</td>
<td>Inequality and Criminal Justice</td>
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<tr>
<td>CRI3220H</td>
<td>Organized Crime and Corruption</td>
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<tr>
<td>CRI3240H</td>
<td>Penology</td>
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<tr>
<td>CRI3270H</td>
<td>The Psychology of Criminal Behaviour: Theory and Practice</td>
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<tr>
<td>CRI3310H</td>
<td>Special Topics in Criminology and Sociolegal Studies</td>
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<tr>
<td>CRI3320H</td>
<td>The Criminal Process</td>
</tr>
<tr>
<td>CRI3330H</td>
<td>Contemporary Issues in Safety and Security</td>
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<tr>
<td>CRI3340H</td>
<td>Special Topics in Criminology and Sociolegal Studies</td>
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<tr>
<td>CRI3350H</td>
<td>Directed Research in Criminology and Sociolegal Studies</td>
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<tr>
<td>CRI3351H</td>
<td>Directed Research in Criminology and Sociolegal Studies</td>
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<tr>
<td>CRI3355H</td>
<td>Sentencing</td>
</tr>
<tr>
<td>CRI3356H</td>
<td>Youth Crime and Youth Justice</td>
</tr>
<tr>
<td>CRI3360Y(^0)</td>
<td>MA Research Paper</td>
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</tbody>
</table>

\(^0\) Course that may continue over a program. Credit is given when the course is completed, or the course is graded when completed.
Curriculum, Teaching and Learning

CTL: Introduction

Faculty Affiliation
Ontario Institute for Studies in Education (OISE)

Degree Programs

Curriculum and Pedagogy

MA, MEd, and PhD

- Emphases:
  - Arts in Education;
  - Critical Studies in Curriculum and Pedagogy;
  - Digital Technologies in Education;
  - Indigenous Education and Decolonization;
  - Qualitative Methodologies;
  - Science, Mathematics and Technology (SMT);
  - Wellbeing

- Field (MEd only):
  - Online Teaching and Learning

Language and Literacies Education

MA

MEd

- Field:
  - Language Teaching

PhD

Teaching

MT

- Fields:
  - Elementary Education;
  - Secondary Education

Combined Degree Programs

- STG, English (Major), Honours BA / MT
- STG, History (Major), Honours BA / MT
- STG, Kinesiology, BKin / MT
- STG, Mathematics (Major), Honours BSc / MT
- STG, Music Education (Stream), MusBac / MT
- STG, Physical Education and Health, BPHE / MT (this program will close on August 31, 2025)
- STG, Psychology (Major), Honours BSc / MT
- STG, Sociology (Major), Honours BA / MT
- UTM, Astronomical Sciences (Specialist), Honours BSc / MT
- UTM, Biological Chemistry (Specialist), Honours BSc / MT
- UTM, Biology for Health Sciences (Major), Honours BSc / MT
- UTM, Biology (Major), Honours BSc / MT
- UTM, Chemistry (Major), Honours BSc / MT
- UTM, Chemistry (Specialist), Honours BSc / MT
- UTM, Comparative Physiology (Specialist), Honours BSc / MT
- UTM, Ecology and Evolution (Specialist), Honours BSc / MT
- UTM, Forensic Biology (Specialist), Honours BSc / MT
- UTM, Forensic Chemistry (Specialist), Honours BSc / MT
- UTM, French Studies (Major), Honours BA / MT
- UTM, French Studies (Specialist), Honours BA / MT
- UTM, Language Teaching and Learning: French and Italian (Specialist), Honours BA / MT
- UTM, Language Teaching and Learning: French (Major), Honours BA / MT
- UTM, Mathematical Sciences (Major), Honours BSc / MT
- UTM, Mathematical Sciences (Specialist), Honours BSc / MT
- UTM, Molecular Biology (Specialist), Honours BSc / MT
- UTM, Physics (Major), Honours BSc / MT
- UTSC, Biochemistry (Major), Honours BSc / MT
- UTSC, Biochemistry (Major Co-op), Honours BSc / MT
- UTSC, Biological Chemistry (Specialist), Honours BSc / MT
- UTSC, Biological Chemistry (Specialist Co-op), Honours BSc / MT
- UTSC, Conservation and Biodiversity (Major), Honours BSc / MT
- UTSC, Conservation and Biodiversity (Specialist), Honours BSc / MT
- UTSC, English (Major), Honours BA / MT
- UTSC, English (Major Co-op), Honours BA / MT
- UTSC, English (Specialist), Honours BA / MT
- UTSC, English (Specialist Co-op), Honours BA / MT
- UTSC, Environmental Biology (Specialist), Honours BSc / MT
- UTSC, Environmental Biology (Specialist Co-op), Honours BSc / MT
- UTSC, Environmental Chemistry (Specialist), Honours BSc / MT
- UTSC, Environmental Chemistry (Specialist Co-op), Honours BSc / MT
- UTSC, Environmental Physics (Specialist), Honours BSc / MT
- UTSC, Environmental Physics (Specialist Co-op), Honours BSc / MT
- UTSC, Evolutionary Anthropology (Major), Honours BSc / MT
• UTSC, Evolutionary Anthropology (Specialist), Honours BSc / MT
• UTSC, French (Major), Honours BA / MT
• UTSC, French (Major Co-op), Honours BA / MT
• UTSC, French (Specialist), Honours BA / MT
• UTSC, French (Specialist Co-op), Honours BA / MT
• UTSC, History (Major), Honours BA / MT
• UTSC, History (Specialist), Honours BA / MT
• UTSC, Human Biology (Major), Honours BSc / MT
• UTSC, Human Biology (Specialist), Honours BSc / MT
• UTSC, Human Geography (Major), Honours BA / MT
• UTSC, Human Geography (Specialist), Honours BA / MT
• UTSC, Integrative Biology (Specialist), Honours BSc / MT
• UTSC, Mathematics (Major), Honours BSc / MT
• UTSC, Mathematics (Major Co-op), Honours BSc / MT
• UTSC, Mathematics (Specialist), Honours BSc / MT
• UTSC, Mathematics (Specialist Co-op), Honours BSc / MT
• UTSC, Molecular Biology and Biotechnology (Specialist), Honours BSc / MT
• UTSC, Molecular Biology and Biotechnology (Specialist Co-op), Honours BSc / MT
• UTSC, Molecular Biology, Immunology and Disease (Major), Honours BSc / MT
• UTSC, Physical and Mathematical Sciences (Specialist), Honours BSc / MT
• UTSC, Physics and Astrophysics (Major), Honours BSc / MT
• UTSC, Physics and Astrophysics (Specialist), Honours BSc / MT
• UTSC, Plant Biology (Major), Honours BSc / MT
• UTSC, Socio-Cultural Anthropology (Major), Honours BA / MT
• UTSC, Socio-Cultural Anthropology (Specialist), Honours BA / MT
• UTSC, Sociology (Major), Honours BA / MT
• UTSC, Sociology (Specialist), Honours BA / MT
• UTSC, Theatre and Performance (Major), Honours BA / MT
• Women and Gender Studies
  o Curriculum and Pedagogy, MA, MEd, PhD
  o Language and Literacies Education, MA, MEd, PhD

Overview

The Department of Curriculum, Teaching and Learning (CTL) is the largest of four departments at the Ontario Institute for Studies in Education (OISE). With a diverse community of tenured, tenure-stream faculty, and lecturers, the department offers a wide range of graduate courses and programs relating to academic scholarship and professional practice. Faculty and students research, write, and teach about a wide variety of subjects concerning children, youth, and teachers, both in and out of schools.

The department offers graduate programs in three areas of study: 1) Curriculum & Pedagogy; 2) Language and Literacies Education; and 3) Teaching. These programs reflect a variety of scholarly interests and are closely linked with the department's strong research base.

Contact and Address

Admissions

Initial inquiries regarding admission to graduate studies in the Department of Curriculum, Teaching and Learning (CTL) should be made directly to:

Web: www.oise.utoronto.ca/orss
Email: admissions.oise@utoronto.ca
Tel: (416) 978-4300
Fax: (416) 323-9964

Office of the Registrar and Student Services
Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West, Room 8-225
Toronto, Ontario M5S 1V6
Canada

Program

Web: www.oise.utoronto.ca/ctl
Email: ctlinquiries@utoronto.ca
Telephone: (416) 978-0040
Fax: (416) 926-4744

Department of Curriculum, Teaching and Learning
Ontario Institute for Studies in Education
University of Toronto
252 Bloor Street West, 11th Floor
Toronto, Ontario M5S 1V6
Canada

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Comparative, International and Development Education
  o Curriculum and Pedagogy, MA, MEd, PhD
  o Language and Literacies Education, MA, MEd, PhD
• Education, Francophones and Diversity
  o Curriculum and Pedagogy, MA, MEd, PhD
  o Language and Literacies Education, MA, MEd, PhD
• Educational Policy
  o Curriculum and Pedagogy, MA, MEd, PhD
  o Language and Literacies Education, MA, MEd, PhD
• Engineering Education
  o Curriculum and Pedagogy, MA, PhD
• Ethnic, Immigration and Pluralism Studies
  o Language and Literacies Education, MA, MEd, PhD
• Knowledge Media Design
  o Curriculum and Pedagogy, MA, MEd, PhD
  o Language and Literacies Education, MA, MEd, PhD
• Sexual Diversity Studies
  o Curriculum and Pedagogy, MA, MEd, PhD
CTL: Graduate Faculty

Full Members

Bale, Jeff - BA, MS, PhD
Bickmore, Kathy - MA, PhD
Brant, Jennifer - PhD
Brett, Clare - BA, MA, PhD
Campbell, Elizabeth - BA, BEd, MEd, PhD
Cooper, Karyn - PhD
Gagne, Antoinette - BEd, MEd, PhD
Gallagher, Kathleen Marie - PhD
Gaztambide-Fernandez, Ruben - BM, MEd, EdD
Gitari, Wanja - BEd, MA, PhD
Goldstein, Tara - BA, PhD
Hewitt, Jim - BEd, BMath, MEd, PhD (Associate Chair, Graduate Studies)
Kempf, Arlo - BA, MEd, PhD
Kerekes, Julie - BA, MA, PhD
Koo, Mary - BA, MA, PhD
Kosnik, Clare - DPhil, DPhil
Labrie, Normand - BA, MA, PhD
Lam, Tony - BA, MA, PhD
Levine, David - BA, MA, PhD
Mantie, Roger Allan - BM, MM, PhD
McDougall, Douglas - BM, BEd, MEd, EdD
Miller, John - BA, MAT, PhD
Morgan, Cecilia Louise - BA, BA, MA, PhD
Niyozov, Sarfaroz - ME, MA, PhD
Nxumalo, Fikile - PhD
Pedretti, Erminia - BE, MEd, PhD
Piccardo, Enrica - MA, PhD
Rehner, Katherine - BA, BE, MEd, PhD
Rolheiser, Carol - BEd, MEd, PhD
Sandwell, Ruth - BA, MA, PhD
Scardamalia, Marlene - PhD
Simon, Rob - BA, MA, MTh, PhD
Slotta, James - BS, MPsy, PhD
Springgay, Stephanie - BEd, BFA, MA, PhD
Stagg Peterson, Shelley - BE, MEd, PhD
Styres, Sandra - BEd, MEd, PhD
Sykes, Heather - BSc, PhD
Trifonas, Peter Pericles - BE, BA, PhD
Troper, Harold - BA, MA, PhD

Members Emeriti

Beattie, Mary - BA, BA, MA, MEd, EdD
Beck, Clive - PhD
Bencze, Lawrence - BEd, BSc, MSc, PhD
Bennett, Barrie - BPHE, MEd, PhD
Bereiter, Carl - PhD
Cameron, Linda - BA, MEd, EdD
Connelly, Michael - BSc, BEd, MSc, PhD
Cumming, Allister - BA, MA, PhD
Cummins, James - BA, PhD
Evans, Mark - BE, BA, MA, PhD
Feuerverger, Grace - BA, MA, PhD
Gerin-Lajoie, Diane - BSc, MA, PhD
Hanna, Gila - BA, MA, MEd, PhD
Jordan, Anne - BA, MA, PhD
Lapkin, Sharon - BA, MA, PhD
Smyth, Elizabeth M. - BA, BEd, MA, EdD
Spada, Nina - BA, MA, PhD
Swain, Merrill - BA, PhD

CTL: Curriculum and Pedagogy Overview

Program Description

The Curriculum and Pedagogy (C&P) program is a forum for systematic reflection on curriculum and pedagogy, viewed in the broadest sense as educational experiences and the learning and teaching experiences that occur in both formal and informal settings. This includes a critical examination of the substance (subject matter, courses, programs of study), purposes, and the practices and relationships through which teaching and learning happen in educational settings. Given the diverse academic and research interests of faculty members, the program is organized into seven constituent but optional program emphases.

The C&P program offers the following seven program emphases:

- Arts in Education
- Critical Studies in Curriculum and Pedagogy
- Digital Technologies in Education
- Indigenous Education and Decolonization
- Qualitative Methodologies
- Science, Mathematics and Technology (SMT)
- Wellbeing

PhD, MA, and MEd students enrolled in the C&P program are required to complete three courses from a list of courses affiliated with the emphasis, in order to have the emphasis noted on their transcript. Upon successful completion of the emphasis requirements and successful completion of the degree requirements, students may make a request with the C&P administrator, prior to graduation, to have the emphasis noted on the student transcript.
CTL: Curriculum and Pedagogy MA

Master of Arts

The MA degree program is designed to provide academic study and research training related to curriculum and pedagogy. Applicants who anticipate going on to further study at the PhD level are advised to apply for enrolment in an MA rather than an MEd degree program. The MA can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
- Admission normally requires an appropriate bachelor's degree, with the equivalent of at least a University of Toronto mid-B or better in the final year, in a relevant discipline or professional program.
- Ordinarily, applicants will have at least one year of relevant, successful, professional experience prior to applying.
- Statement of Intent: Applicants should state the reasons they wish to undertake a research-oriented program of study in curriculum and pedagogy. The chief academic interests and experience, professional concerns, and career plans related to any aspect of curriculum and pedagogy should be discussed. In order to identify their research interests in their Statement of Intent, applicants should visit the Curriculum and Pedagogy program web page. The Admissions Committee reviews this statement to determine the areas of study and/or problems of curriculum and pedagogy in which an applicant is most interested and to link the applicant to appropriate faculty advisors.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - At least 2.0 FCEs, normally CTL 1000-level courses undertaken in the Curriculum and Pedagogy program.
  - CTL1000H *Foundations of Curriculum & Pedagogy* (0.5 FCE).
  - A research methods course (0.5 FCE) from an approved course listing.
  - Additional courses may be required of some applicants, depending on previous experience and academic qualifications.
- **Thesis.**
- Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, and thesis ethical review.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
10 sessions part-time

CTL: Curriculum and Pedagogy MEd

Master of Education

The Master of Education (MEd) degree program is designed chiefly for the professional development of those who are already engaged in a career related to education, broadly defined. Applicants who anticipate going on to further study at the PhD level are advised to apply for enrolment in an MA rather than an MEd degree program. The MEd program is offered as a general program (no field) or as an Online Teaching and Learning field. The field in Ontario Teaching and Learning is designed for students interested in engaging with scholarly research in distance education who want to learn how to effectively instruct and design online courses.

The MEd can be taken on a full-time or part-time basis.

Note: The MEd is not a teacher certification program. Find out more about teacher certification programs.

MEd General Program (No Field)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies, which specify an appropriate bachelor's degree from a recognized university. This degree must be completed with an academic standing equivalent to a University of Toronto mid-B or better in the final year. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
- Ordinarily, applicants will have at least one year of relevant, successful, professional experience prior to applying.
- In the Statement of Intent, applicants should state the reasons they wish to study curriculum at the graduate level. The chief academic interests, professional concerns, and career plans related to curriculum studies and teacher development should be discussed. In order to identify their research interests in their Statement of Intent, applicants should visit the Curriculum and Pedagogy program web page. The admissions committee reviews this statement to determine the kind of focus or area of study in which an applicant is most interested and to link the applicant to appropriate faculty advisors.

Program Requirements

- **Coursework.** Students must complete 5.0 full-course equivalents (FCEs) as follows:
  - At least 2.5 FCEs, normally CTL 1000-level courses undertaken in the Curriculum and Pedagogy program.
• Additional study may be required either within the degree program or prior to admission, depending on previous experience and academic qualifications.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

CTL: Curriculum and Pedagogy MEd; Field: Online Teaching and Learning

Master of Education

The Master of Education (MEd) degree program is designed chiefly for the professional development of those who are already engaged in a career related to education, broadly defined. Applicants who anticipate going on to further study at the PhD level are advised to apply for enrolment in an MA rather than an MEd degree program. The MEd program is offered as a general program (no field) or as an Online Teaching and Learning field. The field in Online Teaching and Learning is designed for students interested in engaging with scholarly research in distance education, who want to learn how to effectively instruct and design online courses.

The MEd can be taken on a full-time or part-time basis.

Note: The MEd is not a teacher certification program. Find out more about teacher certification programs.

Field: Online Teaching and Learning

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies, which specify an appropriate bachelor's degree from a recognized university. This degree must be completed with an academic standing equivalent to a University of Toronto mid-B or better in the final year. Applicants must also satisfy the Department of Curriculum, Teaching and Learning’s additional admission requirements stated below.

• Ordinarily, applicants will have at least one year of relevant, successful, professional experience prior to applying.

• In the Statement of Intent, applicants should state the reasons they wish to study curriculum at the graduate level. The chief academic interests, professional concerns, and career plans related to curriculum studies and teacher development should be discussed. In order to identify their research interests in their Statement of Intent, applicants should visit the Curriculum and Pedagogy program web page. The admissions committee reviews this statement to determine the kind of focus or area of study in which an applicant is most interested and to link the applicant to appropriate faculty advisors.

Program Requirements

• Coursework. Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  o 1.5 FCEs in required courses: CTL1000H, CTL1620H, and CTL1624H.
  o 1.5 FCEs from the following: CTL1603H, CTL1606H, CTL1608H, CTL1609H, CTL1615H, CTL1616H, CTL1617H, CTL1621H, CTL1622H, CTL1623H, CTL1625H, CTL1926H.
  o 2.0 FCEs in elective courses.

• Additional study may be required either within the degree program or prior to admission, depending on previous experience and academic qualifications.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

CTL: Curriculum and Pedagogy PhD

Doctor of Philosophy

The PhD program demands a strong commitment to research. The Curriculum and Pedagogy program offers both full-time and flexible-time PhD program options. Degree requirements for both options are the same; only the length of time to completion differs (see Program Length below). Applicants must declare the option for which they wish to apply.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning’s additional admission requirements stated below.

• A master's degree in education from a recognized university with a grade equivalent to a University of Toronto B+ or better and in the same area of specialization as proposed at the doctoral level is required. Further documentation may be required to establish equivalence.
• Applicants ordinarily have a minimum of two years' professional experience prior to applying.
• Applicants are required to submit, along with the application:
  o Their master's thesis or a sample of single-authored scholarly writing; for details about what constitutes an appropriate writing sample, visit the Curriculum and Pedagogy program web page.
  o A Statement of Intent describing their intellectual interests and concerns relevant to curriculum and pedagogy, reasons for wishing to take the program, previous qualifications and professional experiences, and articulating their research and professional interests, and future career goals
  o Two letters of reference: one academic and one professional.

Program Requirements

• Coursework. Students must normally complete 3.5 full-course equivalents (FCEs) as follows:
  o At least 2.0 FCEs, normally CTL 1000-level courses.
  o CTL1899H C&P Doctoral Proseminar in Curriculum & Pedagogy (0.5 FCE).
  o Students are expected to take CTL100H Foundations of Curriculum & Pedagogy (0.5 FCE) if they did not complete it at the master's level
  o Additional courses may be required of some students.
  o One research methods course (0.5 FCE) from an approved course listing.

• Comprehensive examination.
• A thesis embodying the results of an original investigation, and a Doctoral Final Oral Examination on the content and implications of the thesis.
• Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, comprehensive examination, and thesis ethical review.
• Full-time PhD students must maintain full-time status throughout their program of study.
• Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
• Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

4 years

Time Limit

6 years

PhD Program (Flexible-Time)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.

• A master's degree in education from a recognized university with a grade equivalent to a University of Toronto B+ or better and in the same area of specialization as proposed at the doctoral level is required. Further documentation may be required to establish equivalence.
• Applicants ordinarily have a minimum of two years' professional experience prior to applying.
• Applicants are required to submit, along with the application:
  o Their master's thesis or a sample of single-authored scholarly writing; for details about what constitutes an appropriate writing sample, visit the Curriculum and Pedagogy program web page.
  o A Statement of Intent describing their intellectual interests and research concerns relevant to curriculum and pedagogy, reasons for wishing to take the program, previous qualifications and professional experiences, and articulating their research and professional interests, and future career goals.
  o Two letters of reference: one academic and one professional.
• Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option. Applicants must demonstrate that they are currently employed and are active professionals engaged in activities relevant to their proposed program of study.

Program Requirements

• Coursework. Students must normally complete a total of 3.5 full-course equivalents (FCEs) as follows:
  o At least 2.0 FCEs, normally CTL 1000-level courses.
  o CTL1899H C&P Doctoral Proseminar in Curriculum & Pedagogy (0.5 FCE).
  o Students are expected to take CTL100H Foundations of Curriculum & Pedagogy (0.5 FCE) if they did not complete it at the master's level.
  o One research methods course (0.5 FCE) from an approved course listing.
  o Additional courses may be required of some students.
• Comprehensive examination.
• A thesis embodying the results of an original investigation, and a Doctoral Final Oral Examination on the content and implications of the thesis.
• Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, comprehensive examination, and thesis ethical review.
• Students must register continuously until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department's approval.
• Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

8 years

Time Limit

8 years
Curriculum, Teaching and Learning

CTL: Curriculum and Pedagogy MA, MEd, PhD Emphases

Emphasis: Arts in Education

The emphasis in Arts in Education offers students specialized courses in the areas of music and sound; drama, theatre, and performance; media and visual arts; and other courses that manifest social justice concerns reflected through the arts and cultural production. This emphasis brings together students interested in the arts; elementary and secondary arts specialist teachers and community-based educators interested in arts education in the broader community. They are a vibrant community of scholars and graduate students who thrive on collegiality, intellectual debate, critical analyses, and creative inquiry.

- **Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

- **Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.**

Emphasis: Critical Studies in Curriculum and Pedagogy

The emphasis in Critical Studies in Curriculum and Pedagogy (CSCP) encourages a critical exploration of educational phenomena, within and beyond the scope of schools, from local place-based and transnational comparative perspectives. CSCP courses focus on social justice issues in education, including those related to environmental justice, globalization, colonialism, race, disability, gender, sexuality, conflict-peace, and cultural and linguistic differences.

- **Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

- **Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.**

Emphasis: Digital Technologies in Education

What are the emerging trends in the contemporary educational technology landscape? Given the thousands and thousands of educational apps and web-based technologies available to teachers, where are we seeing potential?

The emphasis in Digital Technologies in Education engages educators in an examination of technology and its effective use in educational contexts. Drawing on research from the fields of the learning sciences, psychology, diversity studies, and information and communication technology, learners will deepen their understanding of such topics as knowledge-building, computational thinking, gamification of learning, online knowledge communities, social media, immersive technologies (virtual reality, augmented reality), technology and assessment, and mobile learning.

- **Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

- **Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.**

Emphasis: Indigenous Education and Decolonization

The emphasis in Indigenous Education and Decolonization not only examines the complex and tangled histories of those on whose traditional lands OISE/University of Toronto is situated — the Ouendat (Wyandot-Huron), Onondowahgah (Seneca-) and the Misi-zaagiing (Mississaugas-Anishinaabek) nations — but also extends to lands across Turtle Island and Abya-Yala. Tkaronto, as a starting place to understand Indigenous Education and Decolonization more globally, is subject to the Dish With One Spoon Wampum Belt Covenant, an agreement between the Hodenosaunee and the Anishinaabe and allied nations to peaceably share and care for the resources around the Great Lakes regions.
This emphasis will provide an entry point into the knowledge systems that emerge from this particular land, with an emphasis on land itself as a teacher and a source of knowledge. The emphasis will be grounded on a decolonial pedagogy, with a commitment to anti-colonization and decolonization practices. Recognizing that these lands have existed, and still do exist, first and foremost in relationship to Indigenous people requires a critical consciousness and acknowledgement of whose traditional lands we are now on as well as the historical and contemporary realities of those relationships. It is this understanding that forms the philosophical foundation upon which all of our courses position themselves within the emphasis.

**Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

### Emphasis: Qualitative Methodologies

The emphasis in Qualitative Methodologies will encourage a focused exploration of qualitative paradigms, approaches, and methods within and beyond the scope of schools and education. This emphasis will allow students to take introductory and specialized courses in a range of contemporary qualitative methodologies in areas such as research and participatory inquiry; arts-based research and performed ethnography; feminist and queer approaches; indigenous methodologies, anti-colonial, decolonial, post-foundational, and social justice research. These courses will address the need for students to deepen their understanding, application, and specialization in qualitative methodologies in education. Students will also explore how qualitative methodologies are applied to non-formal education contexts such as social justice pedagogies.

**Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

Upon successful completion of the Emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

### Emphasis: Science, Mathematics and Technology (SMT)

The emphasis in SMT is dedicated to exploring theory, practice, and contemporary issues pertaining to SMT education in diverse settings and contexts. They are a vibrant community of scholars and graduate students who thrive on collegiality, intellectual debate, critical analyses, and inquiry.

Drawing on research and practice, students will explore and critique SMT education while supporting research, curriculum development, teaching, and innovation. With strong connections to the SMT Centre, and the collaborative specialization in Engineering Education, students will engage deeply with topics such as science, technology engineering, and mathematics (STEM) education; SMT education in formal and informal settings; equity, inclusion, diversity; activism; and social and environmental justice.

**Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student's degree program:

Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the C&P Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

### Emphasis: Wellbeing

The purpose of education should be to move people toward improved connectedness and happiness, as well as to further accomplish and to develop greater opportunities for growth. The emphasis in Wellbeing provides hope and healing for individuals and society through innovative educational experiences by helping people deal well and wisely with issues in their lives and times. The mission is to provide critical educational experiences that awaken the best in the human spirit by addressing issues of public concern.

Critical issues investigated through coursework may be related to mental health, environmental issues, and destructive ethnocentric patterns of behaviour, as well as the wise and ethical use of technology. In addition, strategies for managing anxiety and depression, and for raising awareness of inequitable and discriminatory conditions are similar across differing contexts. Therefore, one must examine one’s own life and circumstances and larger societal and institutional contexts before taking informed action for the greater good of all people.

The goal is agency through self-advocacy and advocacy for others. Through this process, one does not merely deconstruct but also reconstructs through learning about how one’s belief
structures and patterns may become more beneficial to oneself and to those around. More specifically, these holistic approaches involve various forms such as narrative/biography, phenomenology, meditation, mindfulness practice, body work, mental health, and conscious use of technology.

- **Coursework.** From the following course list, MA, MEd, and PhD students must successfully complete 1.5 full-course equivalents (FCEs), which are counted towards the total FCEs required for the student’s degree program:
  - Upon successful completion of the emphasis requirements and the successful completion of the degree requirements, students may make a request to the CSTD Program Administrator to have the emphasis noted on the student transcript. This request must be made before graduation. A course can only be applied to the requirements of a single emphasis.

**CTL: Curriculum and Pedagogy MA, MEd, PhD Courses**

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services’ [course schedule](#).

**Master’s Level**

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Constructive Learning and Design of Online Environments

### CTL1609H
Educational Applications of Computer-Mediated Communication

### CTL1611H
Computer-Mediated Distance Education

### CTL1612H
The Virtual Library (Non-credit)

### CTL1615H
Introduction to AI in Education (Exclusion: CTL5052H)

### CTL1616H
Blended Learning: Issues and Applications

### CTL1617H
Social Media and Education (Exclusion: CTL5015H)

### CTL1620H
Foundations of Online Teaching and Learning

### CTL1621H
Design and Development of Online Content, Media, and Artifacts

### CTL1622H
Data Gathering and Assessment in Online Courses

### CTL1623H
Immersive Technology in Education (Exclusion: CTL5047H)

### CTL1624H
Instructional Design: Beyond the Lecture (Exclusion: CTL5016H)

### CTL1625H
Digital Media and Practices for a Knowledge Society (Exclusion: CTL5036H)

### CTL1797H
Practicum in Curriculum & Pedagogy: Master's Level

### CTL1798H
Individual Reading and Research in Curriculum & Pedagogy: Master's Level

### CTL5010H to CTL5037H
Special Topics in Curriculum: Master's Level

### CTL5036H
Digital Media and Practices for a Knowledge Society

### CTL5047H
Immersive Technology in Education: Virtual Reality and Augmented Reality Applications

### CTL5700H to CTL5715H
Special Topics in Teaching

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### CTL1808H
Curriculum Innovation in Teacher Education

### CTL1809H
Narrative and Story in Research and Professional Practice

### CTL1811H
Writing Research/Research Writing: Moving from Idea to Reality

### CTL1812H
Professional Ethics of Teaching and Schooling

### CTL1817H
Current Issues in Teacher Education

### CTL1818H
Arts in Education: Concepts, Contexts, and Frameworks

### CTL1819H
Multicultural Literature in the Schools: Critical Perspectives and Practices

### CTL1822H
Urban School Research: Youth, Pedagogy, and the Arts

### CTL1825H
The Teacher as a Contemplative Practitioner

### CTL1841H
Research Seminar in Science, Mathematics, and Technology Education

### CTL1844H
Seminar in Evaluation Problems (Prerequisite: CTL2803H, CTL1843H, or equivalent)

### CTL1899H
C&P Doctoral Proseminar in Curriculum & Pedagogy

### CTL1926H
Knowledge Media and Learning

### CTL1998H,Y
Individual Reading and Research in Curriculum & Pedagogy: Doctoral Level

### CTL6000H
Special Topics in C&P: Doctoral Level

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### CTL: Language and Literacies Education Overview

### Program Description

The Language and Literacies Education program investigates questions about the relationships of literacies in language and language in literacies across communities, societies, instructional environments, and informal learning settings.

Language and Literacies Education courses address current issues in the study of applied linguistics and literacies, such as:

- The learning, teaching, and use of additional, Indigenous, official, international/heritage, and sign languages and literacies;
- Curriculum, instruction, and assessment related to the development of first and additional languages and K–12 literacy skills;
- The development of bilingual, multilingual, and transliteracy abilities;
- Language and literacy education policies and planning;
- Pedagogy oriented to multiliteries development, including early literacy and adolescent reading, writing and oral language development, and children’s literature across the curriculum;
- Social justice issues related to plurilingualism and cultural and linguistic diversity; and
Pedagogical implications of the fact that language and literacy are infused into all aspects of learning in contexts characterized by linguistic diversity.

**CTL: Language and Literacies Education**

**MA**

**Master of Arts**

Applicants expecting to pursue a doctorate in the future are advised to enrol in the MA (rather than the MEd) program in Language and Literacies Education (LLE). The MA program can be taken on a full-time or part-time basis.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Admission requires an appropriate bachelor's degree, with the equivalent of a University of Toronto mid-B or better in the final year, in a relevant discipline or professional program. Applicants must also satisfy the Department of Curriculum, Teaching and Learning’s additional admission requirements stated below.
- Ordinarily, applicants should have teacher certification and at least one year of relevant successful professional experience prior to applying.
- All applicants must submit a resumé and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future career goals.

**Program Requirements**

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) or eight half courses as follows.
  - A minimum of 2.0 FCEs in CTL 3000-level courses within the LLE program including CTL3001H Research Colloquium in Language and Literacies Education (0.5 FCE).
  - A research methods course relevant to the topic of the thesis (0.5 FCE). Any of the following courses can fulfill this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - Students wishing to propose an alternative course to fulfill one of the LLE course requirements will be required to obtain the approval of both the LLE graduate program coordinator and either their faculty advisor or their thesis supervisor.
  - Additional courses may be required of some applicants.

- **Thesis.**

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S); 10 sessions part-time

**Time Limit**

3 years full-time; 6 years part-time

**CTL: Language and Literacies Education**

**MEd**

**Master of Education**

The Master of Education (MEd) degree program can be taken on a full-time or part-time basis.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies, which specify an appropriate bachelor's degree from a recognized university, with the equivalent of a University of Toronto mid-B or better in the final year. Applicants must also satisfy the Department of Curriculum, Teaching and Learning’s additional admission requirements stated below.
- Ordinarily, applicants should have teacher certification and at least one year of relevant successful professional experience prior to applying.
- All applicants are required to submit a resumé and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future goals.

**Program Requirements**

- **Coursework.** The MEd program consists of 5.0 full-course equivalents (FCEs) including:
  - A minimum of 2.5 FCEs in CTL 3000-level courses.

**Program Length**

4 sessions full-time (typical registration sequence: F/W/S/F); 10 sessions part-time

**Time Limit**

3 years full-time; 6 years part-time
CTL: Language and Literacies Education
MEd; Field: Language Teaching

Master of Education (Field: Language Teaching)

Within the existing Master of Education (MEd) degree program, the field in Language Teaching includes a structured focus on language teaching foundations. Language Teaching integrates an engagement with scholarly research in Language and Literacies Education with a commitment to excellence in teaching to support graduate students as novice language teachers. Students pursuing this field will graduate with: (a) a solid theoretical and intellectual grounding in LLE research; (b) a course-based, practitioner focus on language teaching foundations; and (c) gained practical experience in a language-education context through a required practicum.

This field is only available on a full-time basis. Priority will be given to novice teachers with less than a year of teaching experience. This field will not lead to Teaching English as a Second Language (TESL) Ontario certification nor to the Certificate of Qualification and Registration with the Ontario College of Teachers.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies, which specify an appropriate bachelor's degree from a recognized university, with the equivalent of a University of Toronto mid-B or better in the final year. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
- Normally, applicants should have at least one year of professional experience prior to applying. Previous classroom teaching experience is not a requirement.
- All applicants are required to submit a resumé and a Statement of Intent describing their reasons for wishing to pursue this field, previous qualifications and professional experiences, particular research or professional interests, and future goals.

Program Requirements

- **Coursework.** Within the MEd program, the Language Teaching field consists of 5.0 full-course equivalents (FCEs) as follows.
  - All students in this field must take the following three courses (1.5 FCEs):
    - CTL3002H Second Language Teaching Methodologies
    - CTL3010H Second Language Learning
    - CTL3797H Practicum in Language and Literacies Education: Master's Level
  - Students must then choose any two of the following courses (1.0 FCE):
    - CTL3000H Foundations of Bilingual and Multicultural Education
    - CTL3003H Planning and Organizing the Second Language Curriculum
    - CTL3008H Critical Pedagogy, Language, and Cultural Diversity
    - CTL3013H Language Assessment

- The remaining 2.5 FCEs can be elective courses taken towards the requirements of a collaborative specialization if applicable, or courses offered within the Department of Curriculum, Teaching and Learning or other departments at OISE or the University of Toronto.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

CTL: Language and Literacies Education
PhD

Doctor of Philosophy

Students participating in the PhD program must have a strong commitment to research. The Language and Literacies Education (LLE) program offers both full-time and flexible-time PhD options. Degree requirements for the full-time and flexible-time options are the same. Applicants must declare their preferred option when applying.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
- An appropriate master's degree with a grade equivalent to a University of Toronto B+ or better from a recognized university is required.
- Admission is contingent upon satisfactory completion of a master's thesis, or the equivalent in the form of a scholarly piece of writing.
- Ordinarily, applicants will have a minimum of two years of relevant professional experience prior to applying.
- Applicants must submit a resumé and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future career goals.
Program Requirements

- **Coursework.** Students must complete **3.5 to 4.0 full-course equivalents (FCEs)** depending on previous experience and academic qualifications, as follows:
  - A minimum of 2.0 FCEs within the LLE program, including CTL3001H *Research Colloquium in Language and Literacies Education* (0.5 FCE) and CTL3899H *Proseminar in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL3001H or CTL3899H was taken at the master's level, students are not permitted to take it again and should substitute it with another LLE program course (0.5 FCE).
  - A research methods course relevant to the topic of the thesis (0.5 FCE). Any of the following courses can fulfill this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - A student wishing to propose an alternative course to fulfill one of the LLE course requirements must obtain the approval of the LLE program coordinator and either their faculty advisor or thesis supervisor.
- **Comprehensive examination.**
- **A thesis** embodying the results of an original investigation, and a **Doctoral Final Oral Examination** on the content and implications of the thesis.
- Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, comprehensive examination, and thesis ethical review.
- Full-time PhD students must maintain full-time status throughout their program of study.
- Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
- Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

4 years

Time Limit

6 years

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning’s additional admission requirements stated below.
- An appropriate master's degree with a grade equivalent to a University of Toronto B+ or better from a recognized university is required.
- Admission is contingent upon satisfactory completion of a master's thesis, or the equivalent in the form of a scholarly piece of writing.
- Ordinarily, applicants will have a minimum of two years of relevant professional experience prior to applying.
- Applicants must submit a resume and a Statement of Intent describing their reasons for wishing to take the program, previous qualifications and professional experiences, particular research or professional interests, and future career goals.
- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities relevant to their proposed program of study.

Program Requirements

- **Coursework.** Students must complete **3.5 to 4.0 full-course equivalents (FCEs)** depending on previous experience and academic qualifications, as follows:
  - A minimum of 2.0 FCEs within the LLE program, including CTL3001H *Research Colloquium in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL3001H was taken at the master's level, students are not permitted to take it again and should substitute it with another LLE program course (0.5 FCE).
  - CTL3899H *Proseminar in Language and Literacies Education* (0.5 FCE), if not previously taken at the master's level. If CTL3899H was taken at the master's level, students are not permitted to take it again and should substitute it with another LLE program course (0.5 FCE).
  - A research methods course relevant to the topic of the thesis (0.5 FCE). Any of the following courses can fulfill this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - A student wishing to propose an alternative course to fulfill one of the LLE course requirements will be required to obtain the approval of the LLE program coordinator and either their faculty advisor or thesis supervisor.
- **Comprehensive examination.**
- **A thesis** embodying the results of an original investigation, and a **Doctoral Final Oral Examination** on the content and implications of the thesis.
- Students are responsible for meeting deadlines to complete their course requirements, thesis committee formation, comprehensive examination, and thesis ethical review.
- Students must register continuously until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department's approval.
- Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

7 years

Time Limit

8 years
# CTL: Language and Literacies Education

## MA, MEd, PhD Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services’ course schedule.

### Master's Level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APD1251H</td>
<td>Reading in a Second Language</td>
</tr>
<tr>
<td>APD1296H</td>
<td>Assessing School-Aged Language Learners</td>
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<tr>
<td>CTL3000H</td>
<td>Foundations of Bilingual and Multicultural Education</td>
</tr>
<tr>
<td>CTL3001H</td>
<td>Research Colloquium in Language and Literacies Education</td>
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<tr>
<td>CTL3002H</td>
<td>Second Language Teaching Methodologies</td>
</tr>
<tr>
<td>CTL3003H</td>
<td>Planning and Organizing the Second Language Curriculum</td>
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<tr>
<td>CTL3004H</td>
<td>Language Awareness and its Role in Teacher Development</td>
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<tr>
<td>CTL3007H</td>
<td>Discourse Analysis (Exclusion: CTL3200H)</td>
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<td>CTL3008H</td>
<td>Critical Pedagogy, Language, and Cultural Diversity</td>
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<tr>
<td>CTL3010H</td>
<td>Second Language Learning</td>
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<tr>
<td>CTL3011H</td>
<td>Cognitive, Sociolinguistic, and Sociopolitical Orientations in Bilingual Education Research (Exclusion: CTL3001H)</td>
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<tr>
<td>CTL3013H</td>
<td>Language Assessment</td>
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<td>CTL3015H</td>
<td>Language and Literacies Education in Multilingual Contexts</td>
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<td>CTL3018H</td>
<td>Language Planning and Policy (Exclusion: CTL3020H)</td>
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<td>CTL3020H</td>
<td>Writing in a Second Language</td>
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<tr>
<td>CTL3024H</td>
<td>Language Teacher Education</td>
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<td>CTL3025H</td>
<td>Educational Sociolinguistics</td>
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<tr>
<td>CTL3026H</td>
<td>Pragmatics in Language Education</td>
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<tr>
<td>CTL3028H</td>
<td>Literacy in Elementary Education</td>
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<tr>
<td>CTL3029H</td>
<td>Children's Literature as a Foundation of Literate Behaviour Across the Curriculum</td>
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<tr>
<td>CTL3030H</td>
<td>Theory and Practice in Elementary Literacy Instruction</td>
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<tr>
<td>CTL3031H</td>
<td>Children's Literature Within a Multicultural Context</td>
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<tr>
<td>CTL3032H</td>
<td>Teaching Writing in the Classroom</td>
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<tr>
<td>CTL3033H</td>
<td>Literary Research Methodologies</td>
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<td>CTL3034H</td>
<td>New Literacies: Making Multiple Meanings</td>
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<td>CTL3035H</td>
<td>Critical Literacy in Action</td>
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<tr>
<td>CTL3036H</td>
<td>Expressive Writing: Practice and Pedagogy</td>
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<tr>
<td>CTL3037H</td>
<td>Biography in Educational Contexts</td>
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<tr>
<td>CTL3038H</td>
<td>Play, Language, and Literacy in Primary Classrooms (Exclusion: CTL5302H)</td>
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<tr>
<td>CTL3039H</td>
<td>Academic English Research and Acquisition (Credit/No Credit; exclusion: CTL5305H)</td>
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<tr>
<td>CTL3100H</td>
<td>Communication and Second Language Learning in the Workplace</td>
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<td>CTL3101H</td>
<td>Language Awareness for Language Educators</td>
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<td>CTL3200H</td>
<td>Analyse du discours (Exclusion: CTL3007H)</td>
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<tr>
<td>CTL3201H</td>
<td>Bilinguisme et éducation (Exclusion: CTL3011H)</td>
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<tr>
<td>CTL3202H</td>
<td>Politique et aménagement linguistique (Exclusion: CTL3018H)</td>
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<td>CTL3410H</td>
<td>Schooling in the Movies: Education as Reflected in Hollywood Films</td>
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<td>CTL3411H</td>
<td>Cinema and Historical Literacy</td>
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<td>CTL3412H</td>
<td>Shakespeare and Cultural Literacy</td>
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<td>CTL3413H</td>
<td>Reading Cinema and Cultural Identity</td>
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<td>CTL3414H</td>
<td>Historical Literacy and Popular Culture</td>
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<td>CTL3415H</td>
<td>Educational Thought and Historical Literature</td>
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<td>CTL3797H</td>
<td>Practicum in Language and Literacies Education: Master's Level</td>
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<td>CTL3798H</td>
<td>Individual Reading and Research in Language and Literacies Education: Master's Level</td>
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<tr>
<td>CTL3899H</td>
<td>Proseminar in Language and Literacies Education Program: Master's Level</td>
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<tr>
<td>CTL5300H</td>
<td>Special Topics in Language and Literacies Education Program: Master's Level</td>
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<tr>
<td>CRE1001H</td>
<td>Séminaire d'études : Éducation, francophonies et diversité</td>
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<td>JTE1952H</td>
<td>Language, Culture, and Education</td>
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### Doctoral Level

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<tr>
<td>CTL3805H</td>
<td>Multilingualism and Plurilingualism</td>
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<tr>
<td>CTL3806H</td>
<td>Sociocultural Theory and Second Language Learning</td>
</tr>
<tr>
<td>CTL3807H</td>
<td>Second Language Education Research Methods (RM)</td>
</tr>
<tr>
<td>CTL3808H</td>
<td>The Role of Instruction in Second Language Learning</td>
</tr>
</tbody>
</table>
### CTL: Teaching MT

#### Master of Teaching

**Program Description**

This program involves two years of full-time study leading to a Master of Teaching (MT) degree. Upon successful completion of this program, students will be recommended to the Ontario College of Teachers for an Ontario Teachers' Certificate of Qualification, which qualifies them to teach in either the Primary and Junior (P/J) divisions, the Junior and Intermediate (J/I) divisions, or the Intermediate and Senior (I/S) divisions of Ontario schools.

The MT program offers students a unique educational opportunity, which combines teacher qualification with advanced study of educational theory and an opportunity to conduct research. The program provides students with a strong grounding in curriculum; human development; ethics and educational law; equity diversity and inclusion; Indigenous education; educational technology; instructional planning; instructional design; and learning theory. Students enjoy four practice teaching experiences in which they develop their skills as teachers and extend the theoretical and practical knowledge they acquired in the academic portion of the program.

The program includes: formal coursework, teaching and research seminars, and practice teaching.

The 20-month program is normally completed on a full-time basis in 5 terms:

- Terms 1 and 2 (Fall and Winter sessions [September to April])
- Term 3 (Summer session [May to August])
- Terms 4 and 5 (Fall and Winter sessions [September to April]).

Registration in Terms 4 and 5 is contingent upon successful completion of all courses in Terms 1, 2, and 3 and two successful placements.

Applicants must select one of the following teaching divisions:

- Primary/Junior (junior kindergarten to grade 6)
- Junior/Intermediate (grades 4 to 10)
- Intermediate/Senior (grades 7 to 12).

### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
- Applicants must have an appropriate bachelor's degree with the equivalent of a University of Toronto mid-B or better in the final year.
- In their Statement of Intent, applicants should indicate their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of learners. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. In their resumé applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students. For details about the Statement of Intent, visit the MT program website.

- **Applicants to the Junior/Intermediate (J/I) division within the Elementary field** must select one subject specialization, known as "teachable" or "teaching subject." Before applying to the J/I division, applicants must ensure they have the required number of prerequisite courses for the teaching subject. The prerequisites for teaching subjects in the J/I division are a minimum of 3.0 full-course equivalents (FCEs) for the teaching subject from a recognized university. Note that the prerequisite for French (Second Language) is 5.0 FCEs. For more details about subject specializations and their prerequisites, visit the MT program website.

- **Applicants to the Intermediate/Senior (I/S) division within the Secondary field** must have two subject specializations, known as "teachable" or "teaching subject", of which one subject is selected as their first subject specialization and one as their second subject specialization. Before applying to the I/S division, applicants must ensure they have the required number of prerequisite courses for the teaching subject. The prerequisites are a minimum of 6.0 FCEs in the first teaching subject and a minimum of 3.0 FCEs in the second teaching subject from a recognized university. Note that the prerequisites for the teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General are 6.0 FCEs regardless of whether these teaching subjects are first or second subject specializations. For more details about subject specializations and their prerequisites, visit the MT program website.

- Not all eligible applicants are guaranteed admission.
- A police record check is required in a practicum setting in both Years 1 and 2 of the program.

### Program Requirements

- **Coursework.** Students must complete 11.0 full-course equivalents (FCEs) consisting of:
  - 8.0 FCEs: 16 (or equivalent) compulsory core courses; Primary/Junior and Junior/Intermediate divisions include quarter-credit courses.
  - 1.0 FCE: 2 elective courses.
2.0 FCEs: 4 practice teaching courses: CTL7080H, CTL7081H, CTL7082H, and CTL7083H. There is one placement per course, totalling four teaching placements.

- On successful completion, students receive the MT degree and a recommendation to the Ontario College of Teachers for an Ontario Teachers’ Certificate of Qualification.
- Normally, advanced standing is not granted in this program.
- Students registered in the Primary/Junior and Junior/Intermediate divisions must successfully complete the non-credit seminar course CTL7100H *Mathematics Concepts for Elementary Teacher Candidates* (0.0 FCE), also known as MathPlus, during their first session of registration.

### Program Length
5 sessions full-time (typical registration sequence: F/W/S/F/W)

### Time Limit
3 years full-time

##CTL: Teaching MT Courses

###Primary/Junior Division (Junior Kindergarten to Grade 6)

####Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CTL7000H</td>
<td>Curriculum and Teaching in Literacy</td>
</tr>
<tr>
<td>CTL7001H</td>
<td>Educational Professionalism, Ethics, and Law</td>
</tr>
<tr>
<td>CTL7002H</td>
<td>Curriculum and Teaching in Mathematics</td>
</tr>
<tr>
<td>CTL7006H</td>
<td>Educational Research 1</td>
</tr>
<tr>
<td>CTL7008H</td>
<td>Introduction to Special Education and Mental Health</td>
</tr>
<tr>
<td>CTL7009H</td>
<td>Anti-Discriminatory Education</td>
</tr>
<tr>
<td>CTL7011H</td>
<td>Child and Adolescent Development and Learning</td>
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<tr>
<td>CTL7014H</td>
<td>Fundamentals of Teaching and Learning</td>
</tr>
<tr>
<td>CTL7015H</td>
<td>Educational Research 2</td>
</tr>
<tr>
<td>CTL7016H</td>
<td>Integrating Technology into the Classroom: Issues and Activities</td>
</tr>
<tr>
<td>CTL7018H</td>
<td>Curriculum and Teaching in Science and Environmental Education</td>
</tr>
<tr>
<td>CTL7019H</td>
<td>Supporting English Language Learners</td>
</tr>
<tr>
<td>CTL7072H</td>
<td>Curriculum and Teaching in Social Studies and Indigenous Education</td>
</tr>
</tbody>
</table>

###CTL7080H | Practice Teaching Year 1 (Part 1) (Credit/No Credit) |
###CTL7081H | Practice Teaching Year 1 (Part 2) (Credit/No Credit) |
###CTL7082H | Practice Teaching Year 2 (Part 1) (Credit/No Credit) |
###CTL7083H | Practice Teaching Year 2 (Part 2) (Credit/No Credit) |
###CTL7084H | Issues in Numeracy (0.25 FCE) |
###CTL7085H | Issues in Literacy (0.25 FCE) |
###CTL7086H | Curriculum and Teaching in Music and Dance (0.25 FCE) |
###CTL7087H | Curriculum and Teaching in Drama and Dance (0.25 FCE) |
###CTL7088H | Curriculum and Teaching in Visual Arts (0.25 FCE) |
###CTL7089H | Curriculum and Teaching in Physical Education (0.25 FCE) |
###CTL7100H | Mathematics Concepts for Elementary Teacher Candidates* (Non-credit) |

*Students registered in the Primary/Junior division must successfully complete the non-credit seminar course CTL7100H *Mathematics Concepts for Elementary Teacher Candidates*, also known as MathPlus, during their first session of registration.

####Elective Courses

<table>
<thead>
<tr>
<th>Plus 1.0 FCE</th>
<th>Two elective courses</th>
</tr>
</thead>
</table>

###Junior/Intermediate Division (Grade 4 to Grade 10)

####Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL7000H</td>
<td>Curriculum and Teaching in Literacy</td>
</tr>
<tr>
<td>CTL7001H</td>
<td>Educational Professionalism, Ethics, and Law</td>
</tr>
<tr>
<td>CTL7002H</td>
<td>Curriculum and Teaching in Mathematics</td>
</tr>
<tr>
<td>CTL7006H</td>
<td>Educational Research 1</td>
</tr>
<tr>
<td>CTL7008H</td>
<td>Introduction to Special Education and Mental Health</td>
</tr>
<tr>
<td>CTL7009H</td>
<td>Anti-Discriminatory Education</td>
</tr>
<tr>
<td>CTL7011H</td>
<td>Child and Adolescent Development and Learning</td>
</tr>
<tr>
<td>CTL7013H</td>
<td>Arts in Education</td>
</tr>
<tr>
<td>CTL7014H</td>
<td>Fundamentals of Teaching and Learning</td>
</tr>
<tr>
<td>CTL7015H</td>
<td>Educational Research 2</td>
</tr>
</tbody>
</table>
CTL7016H Integrating Technology into the Classroom: Issues and Activities

CTL7018H Curriculum and Teaching in Science and Environmental Education

CTL7019H Supporting English Language Learners

CTL7072H Curriculum and Teaching in Social Studies and Indigenous Education

CTL7080H Practice Teaching Year 1 (Part 1) (Credit/No Credit)

CTL7081H Practice Teaching Year 1 (Part 2) (Credit/No Credit)

CTL7082H Practice Teaching Year 2 (Part 1) (Credit/No Credit)

CTL7083H Practice Teaching Year 2 (Part 2) (Credit/No Credit)

CTL7084H Issues in Numeracy (0.25 FCE)

CTL7085H Issues in Literacy (0.25 FCE)

CTL7100H Mathematics Concepts for Elementary Teacher Candidates* (Non-credit)

*Students registered in the Junior/Intermediate division must successfully complete the non-credit seminar course CTL7100H Mathematics Concepts for Elementary Teacher Candidates, also known as MathPlus, during their first session of registration.

Elective Courses

| Plus 0.5 FCE | One subject specialization course selected from CTL7050H to CTL7060H |
| Plus 1.0 FCE | Two elective courses |

For Junior/Intermediate certification, students take one subject specialization course in Year 2 (the list of subject specializations are subject to change):

Intermediate Subject Specialization Courses for Junior/Intermediate Division Certification

| CTL7050H | Intermediate Teaching Subject — English (First Language) |
| CTL7051H | Intermediate Teaching Subject — French (Second Language) |
| CTL7052H | Intermediate Teaching Subject — Geography |
| CTL7053H | Intermediate Teaching Subject — Health and Physical Education |
| CTL7054H | Intermediate Teaching Subject — History |
| CTL7055H | Intermediate Teaching Subject — Mathematics |
| CTL7056H | Intermediate Teaching Subject — Music-Instrumental |

| CTL7057H | Intermediate Teaching Subject — Music-Vocal |
| CTL7058H | Intermediate Teaching Subject — Science-General |
| CTL7059H | Intermediate Teaching Subject — Visual Arts |
| CTL7060H | Intermediate Teaching Subject — Drama |

Prerequisites

Before applying to the Junior/Intermediate division, applicants must ensure they have the required number of prerequisite courses for the teaching subjects. See the admission requirements above for details or visit the MT program website for subject specializations and their required prerequisites.

Intermediate/Senior Division (Grade 7 to Grade 12)

Core Courses

| CTL7006H | Educational Research 1 |
| CTL7007H | Authentic Assessment |
| CTL7008H | Introduction to Special Education and Mental Health |
| CTL7009H | Anti-Discriminatory Education |
| CTL7011H | Child and Adolescent Development and Learning |
| CTL7014H | Fundamentals of Teaching and Learning |
| CTL7015H | Educational Research 2 |
| CTL7016H | Integrating Technology into the Classroom: Issues and Activities |
| CTL7019H | Supporting English Language Learners |
| CTL7070H | Sustainability Education: Issues and Practice |
| CTL7073H | Indigenous Experiences of Racism and Settler Colonialism in Canada: An Introduction |
| CTL7074H | Issues in Educational Law, Policy, and Ethics |
| CTL7080H | Practice Teaching Year 1 (Part 1) (Credit/No Credit) |
| CTL7081H | Practice Teaching Year 1 (Part 2) (Credit/No Credit) |
| CTL7082H | Practice Teaching Year 2 (Part 1) (Credit/No Credit) |
| CTL7083H | Practice Teaching Year 2 (Part 2) (Credit/No Credit) |
Elective Courses

Plus 1.0 FCE  
First subject specialization course selected from CTL7020Y to CTL7041Y; see full course list below

Plus 1.0 FCE  
Second subject specialization course selected from CTL7020Y to CTL7041Y; see full course list below

Plus 1.0 FCE  
Two elective courses

Intermediate/Senior Specialization Courses

The Intermediate/Senior students must have two subject specializations. Students must select one subject specialization from the following list as their first subject specialization and one as their second subject specialization (the list of subject specializations is subject to change).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL7020Y</td>
<td>Curriculum and Teaching in English — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7021Y</td>
<td>Curriculum and Teaching in History — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7022Y</td>
<td>Curriculum and Teaching in Mathematics — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7023Y</td>
<td>Curriculum and Teaching in Science: Biology — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7024Y</td>
<td>Curriculum and Teaching in Science: Chemistry — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7025Y</td>
<td>Curriculum and Teaching in Science: Physics — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7026Y</td>
<td>Curriculum and Teaching in Science: General</td>
</tr>
<tr>
<td>CTL7027Y</td>
<td>Curriculum and Teaching in Social Science: General — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7028Y</td>
<td>Curriculum and Teaching in Geography — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7029Y</td>
<td>Curriculum and Teaching in Music: Instrumental — Intermediate/Senior</td>
</tr>
<tr>
<td>CTL7030Y</td>
<td>Curriculum and Teaching in Music: Vocal</td>
</tr>
<tr>
<td>CTL7031Y</td>
<td>Curriculum and Teaching in Health and Physical Education</td>
</tr>
<tr>
<td>CTL7032Y</td>
<td>Curriculum and Teaching in Visual Arts — Intermediate/Secondary</td>
</tr>
<tr>
<td>CTL7033Y</td>
<td>Curriculum and Teaching in Dramatic Arts — Intermediate/Secondary</td>
</tr>
<tr>
<td>CTL7034Y</td>
<td>Curriculum and Teaching in French as a Second Language — Intermediate/Secondary</td>
</tr>
<tr>
<td>CTL7035Y</td>
<td>Curriculum and Teaching in Business Studies: General — Intermediate/Secondary (Exclusion: CTL7036Y.)</td>
</tr>
<tr>
<td>CTL7041Y</td>
<td>Curriculum and Teaching in Religion</td>
</tr>
</tbody>
</table>

Prerequisites

Before applying to the Intermediate/Senior division, applicants must ensure that they have the required number of prerequisite courses for the teaching subjects. See the admission requirements above for details or visit the MT program website for teaching subject specializations and their prerequisites.

Religious Education

All MT students interested in teaching in the Ontario Catholic School system can choose to take the Teaching in Ontario’s Catholic Schools course through the Continuing and Professional Learning office. This course is required by the Catholic boards as a prerequisite for a job interview and as a condition of employment. Offered in Year 1 of the MT program, this course is in addition to the degree’s program requirements.
Dentistry

Dentistry: Introduction

Faculty Affiliation

Dentistry

Degree Programs

Dentistry

MSc and PhD

- Fields:
  - Dental Anaesthesia;
  - Dental Biomedical Sciences (this field is taken by MSc and PhD students who are not in a specialty);
  - Dental Public Health;
  - Endodontics;
  - Oral and Maxillofacial Pathology;
  - Oral and Maxillofacial Pathology and Oral Medicine;
  - Oral and Maxillofacial Radiology;
  - Oral and Maxillofacial Surgery;
  - Oral Medicine;
  - Orthodontics and Dentofacial Orthopedics;
  - Pediatric Dentistry;
  - Periodontics;
  - Prosthodontics

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Aging, Palliative and Supportive Care Across the Life Course
  - Dentistry, MSc, PhD
- Biomedical Engineering
  - Dentistry, MSc, PhD
- Cardiovascular Sciences
  - Dentistry, MSc, PhD
- Global Health (U of T Global Scholar)
  - Dentistry, MSc (thesis only), PhD
- Musculoskeletal Sciences
  - Dentistry, MSc, PhD
- Neuroscience
  - Dentistry, MSc, PhD
- Women's Health
  - Dentistry, MSc, PhD

Overview

The Faculty of Dentistry offers graduate programs leading to either a Master of Science or Doctor of Philosophy degree. These graduate programs appeal to:

- applicants, both dentists and non-dentists, who wish to pursue graduate research training; and
- applicants who have a degree in dentistry and who are pursuing research training and advanced clinical education in one of the dental specialties (also known as fields).

Consequently, both the MSc and the PhD degrees have a common core of coursework, with each having varying additional research and clinical training requirements (if applicable).

The Dentistry MSc program develops students’ scholarly skills and critical thoughts, and is intended for those whose career goal is to achieve mastery of a field in oral health science, employment in a research environment, or clinical specialty practice (if applicable). The MSc in Dentistry can be completed through the following options: 1) thesis in the field of Dental Biomedical Sciences, 2) thesis with dental specialty, or 3) coursework only with dental specialty.

The Dentistry PhD program is intended for those whose career goal is to work at the forefront of their field in oral health sciences as an independent research scientist or clinician-scientist in an academic, governmental, or industrial setting. This thesis-based program can be completed with or without a dental specialty, and on a full-time basis only.

Contact and Address

Web: [www.dentistry.utoronto.ca](http://www.dentistry.utoronto.ca)
Email: gradstudies@dentistry.utoronto.ca
Telephone: (416) 864-8114
Fax: (416) 979-4944

Faculty of Dentistry, Student Services Office
University of Toronto
Room 104, 124 Edward Street
Toronto, Ontario M5G 1G6
Canada

Dentistry: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Aubin, Jane - BSc, PhD
Avivi-Arber, Limor - MSc, DMD, BMedSc, PhD
Azarpazhooh, Amir - MSc, DDS, PhD
Bozec, Laurent - BSc, PhD
Bressmann, Tim - MPH, PhD
Casas, Michael - MSc, DDS
Casper, Robert - MD
Cvitkovitch, Dennis - BSc, MSc, PhD
Davies, John - BSc, BDSc, PhD, DSc
de Souza, Grace M. - MS, DDS, PhD
Dempster, Laura - BScD, MSc, PhD
Deporter, Douglas - DipPerio, DDS, PhD
Dostrovsky, Jonathan - BSc, MSc, PhD
Finer, Yoav - MSc, MSc, DMD, PhD
Friedman, Shimon - DMD
Ganss, Bernhard - BSc, MSc, DrRerNat
Glogauer, Michael - DDS, PhD
Dentistry: Dentistry MSc (Dental Biomedical Sciences Field)

Program Description

The Dentistry MSc program, Dental Biomedical Sciences field develops students’ scholarly and critical thinking skills, and is intended for those whose career goal is to achieve mastery of a field in oral health science or employment in a research environment. The program length is six sessions, with most students taking two years to complete the requirements.

A part-time option is also available. Part-time students complete the same program requirements over an extended period of time (usually 12 sessions). Note: part-time students are ineligible to transfer to the PhD field in Dental Biomedical Sciences.

Additionally, MSc students in the field of Dental Biomedical Sciences are ineligible to transfer to a PhD program with a dental specialty.

MSc Program (Dental Biomedical Sciences): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- An appropriate BSc, Doctor of Dental Surgery (DDS), or an equivalent degree, with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 3.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - An additional 1.0 elective FCE.
  - Year 2: Research, thesis completion, and oral defence of the written thesis.
- Residency. Ordinarily, one year of full-time registration; however, it is the Faculty of Dentistry’s expectation that students will normally remain in full-time attendance on campus to enable full participation in departmental activities for two years.
Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S); 12 sessions part-time

Time Limit

3 years full-time; 6 years part-time

° Course that may continue over a program. Credit is given when the course is completed.

Dentistry: Dentistry MSc (Dental Anaesthesia Specialty)

MSc Program (Dental Anaesthesia Specialty)

Program Description

The Dentistry MSc, Dental Anaesthesia specialty is a three-year full-time program. The specialty in Dental Anaesthesia is designed to prepare dentists with a full range of sedation and anaesthetic techniques for dental patients with the focus on deep sedation and general anaesthesia. The teaching facilities for this program are provided by the combined resources of Dental Anaesthesia in the Faculty of Dentistry and the Department of Anaesthesia in the Temerty Faculty of Medicine. Training is given both at the Faculty of Dentistry and at teaching hospitals associated with the University.

Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty. Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Dental Anaesthesia Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Dental Anaesthesia, complete 15.5 required FCEs as follows. Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
  - **Year 1:**
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1055H Basic Principles of Anaesthesia (0.5 FCE)
    - DEN1056Y Basic Concepts in Clinical Medicine (1.0 FCE)
    - DEN1073Y Dental Anaesthesia Graduate Seminars (1.0 FCE)
    - DEN1074Y Foundations of Medicine as Applied to Dental Anaesthesia (1.0 FCE)
    - DEN1076H General Anaesthesia for Medical Procedures — Adult I (0.5 FCE)
    - DEN1078H General Anaesthesia for Dental Procedures — Adult I (0.5 FCE)
    - DEN1084H Experiences in Clinical Teaching I (Credit/No Credit; 0.5 FCE)
    - DEN1087Y Fundamentals of Dental Anaesthesia (1.0 FCE)
    - Begin thesis research (RST9999Y)
  - **Year 2:**
    - DEN1052Y General Anaesthesia for Medical Procedures — Pediatric (1.0 FCE)
    - DEN1071H Medical Anaesthesia Seminars I (Credit/No Credit; 0.5 FCE)
    - DEN1083Y Experiences in Clinical Medicine (1.0 FCE)
    - DEN1085H Experiences in Clinical Teaching II (Credit/No Credit; 0.5 FCE)
    - DEN1088Y Fundamentals of Dental Anaesthesia II (1.0 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN1072H Medical Anaesthesia Seminars II (Credit/No Credit; 0.5 FCE)
    - DEN1075Y General Anaesthesia for Dental Procedures — Pediatric (1.0 FCE)
    - DEN1077H General Anaesthesia for Dental Procedures — Adult II
    - DEN1079H General Anaesthesia for Dental Procedures — Adult II (0.5 FCE)
    - DEN1086H Experiences in Clinical Teaching III (Credit/No Credit; 0.5 FCE)
    - DEN1089Y Fundamentals of Dental Anaesthesia II (1.0 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

**Time Limit**

4 years full-time

- Course that may continue over a program. The course is graded or credit is given when completed.

++ Course is offered in alternate years.

**MSc Program (Dental Anaesthesia Specialty): Coursework-Only Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

**Program Requirements**

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Dental Anaesthesia, complete a total of 15.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details
  - Year 1:
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1055H Basic Principles of Anaesthesia (0.5 FCE)
    - DEN1056Y Basic Concepts in Clinical Medicine (1.0 FCE)
    - DEN1073Y Dental Anaesthesia Graduate Seminars (1.0 FCE)
    - DEN1074Y Foundations of Medicine as Applied to Dental Anaesthesia (1.0 FCE)
    - DEN1075H+ General Anaesthesia for Medical Procedures — Adult I (0.5 FCE)
    - DEN1076H+ General Anaesthesia for Dental Procedures — Adult I (0.5 FCE)
    - DEN1077H+ Medical Anaesthesia Seminars I (Credit/No Credit; 0.5 FCE)
    - DEN1083Y Experiences in Clinical Medicine (1.0 FCE)
    - DEN1085H+ Experiences in Clinical Teaching II (Credit/No Credit; 0.5 FCE)
    - DEN1089Y Fundamentals of Dental Anaesthesia II (1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit)
  - Year 2:
    - DEN1052Y General Anaesthesia for Medical Procedures — Pediatric (1.0 FCE)
    - DEN1071H+ Medical Anaesthesia Seminars I (Credit/No Credit; 0.5 FCE)
    - DEN1083Y Experiences in Clinical Medicine (1.0 FCE)
    - DEN1085H+ Experiences in Clinical Teaching II (Credit/No Credit; 0.5 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - DEN1086H+ Experiences in Clinical Teaching III (Credit/No Credit; 0.5 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.

- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

**Time Limit**

4 years full-time

- Course that may continue over a program. The course is graded or credit is given when completed.

++ Course is offered in alternate years.
Dentistry: Dentistry MSc (Dental Public Health Specialty)

MSc Program (Dental Public Health Specialty)

Program Description

The Dentistry MSc, Dental Public Health specialty is a two-year program. The specialty in Dental Public Health consists of core subjects, with optional subjects chosen by students in consultation with the program director. Courses are given by the Faculty of Dentistry as well as other units, such as the Dalla Lana School of Public Health and the Institute of Health Policy, Management and Evaluation.

This program is offered both full-time and part-time. Part-time students have up to five years to complete all requirements. Note: part-time students are ineligible to transfer to the PhD in Dentistry program.

The coursework-only option of this specialty is also available to dental hygienists. Students in the coursework-only option are ineligible to transfer to the PhD in Dentistry program.

 Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

MSc Program (Dental Public Health Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Year 2:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Dental Public Health, complete 7.0 required FCEs as follows:
  - Year 1:
    - CHL5004H Introduction to Public Health Sciences (0.5 FCE)
- DEN1003H Preventive Dentistry (0.5 FCE)
- DEN1006Y Seminars in Dental Public Health (1.0 FCE)
- DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
- DEN1051Y Oral Epidemiology (1.0 FCE)
- DEN1063Y Practicum in Dental Public Health (1.0 FCE)
- PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
- Begin thesis research (RST9999Y)
  - Year 2:
    - DEN1064H Management Principles in Canadian Dental Health Organizations (0.5 FCE)
    - 0.5 FCE chosen in the area of health policy or health economics based on the student’s clinical or research interests
    - 0.5 FCE chosen in the area of public health based on the student’s clinical or research interests
    - Oral defence of the written thesis (RST9999Y).

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S); 12 sessions part-time

MSc Program (Dental Public Health Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree, with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.
- Dental hygienist applicants must have a baccalaureate dental hygiene degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in their final year of study.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - CHL5004H Introduction to Public Health Sciences (0.5 FCE)
Dentistry: Dentistry MSc (Endodontics Specialty)

MSc Program (Endodontics Specialty) Program Description

The Dentistry MSc, Endodontics specialty is a three-year full-time program. The specialty in Endodontics is designed to provide students with opportunities to acquire excellent clinical skills and comprehension of the underlying biology. Its components include patient care, providing all aspects of endodontic treatment; topic-specific and current literature seminars; clinical conferences; core curriculum courses; rotation programs; research at the MSc level, including application for funding, preparation of manuscripts for publication, presentation at national and international research forums; and guest lectures.

Students must complete a dental clinic rotation as part of the Endodontics specialty requirements.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Endodontics Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1**:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Year 2**:
    - DEN1001Y° Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).

In the specialty of Endodontics, complete 18.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

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° Course that may continue over a program. The course is graded or credit is given when completed.
Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)
Dentistry: Dentistry MSc (Oral and Maxillofacial Pathology Specialty)

MSc Program (Oral and Maxillofacial Pathology Specialty)

Program Description

The Dentistry MSc, Oral and Maxillofacial Pathology specialty is a three-year full-time program. The specialty in Oral and Maxillofacial Pathology focuses on the identification and management of diseases of the oral and maxillofacial regions through microscopic, clinical, biochemical, or other forms of examination. Oral and Maxillofacial Pathology includes histopathologic analysis of tissue samples, the investigation of causes, and effects of diseases.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Oral and Maxillofacial Pathology Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 1:**
    - LMP1300Y General and Special Pathology (1.0 FCE)

- Course that may continue over a program. The course is graded or credit is given when completed.

- Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

- Course is offered in alternate years.
- Begin thesis research (RST 9999Y)
  - Year 2:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1011Y Seminar in Advanced Oral Pathology
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - Continue with thesis research (RST9999Y)
  - Year 3:
    - DEN1011Y Seminar in Advanced Oral Pathology (1.0 FCE)
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology
    - Oral defence of the written thesis (RST9999Y).

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

° Course that may continue over a program. The course is graded or credit is given when completed.

MSc Program (Oral and Maxillofacial Pathology Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1011Y Seminar in Advanced Oral Health Sciences (Credit/No Credit; 1.0 FCE).
  - In the specialty of Oral and Maxillofacial Pathology, complete 5.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1006H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - LMP1300Y General and Special Pathology (1.0 FCE)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Year 2:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1011Y Seminar in Advanced Oral Pathology
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - Year 3:
    - DEN1011Y Seminar in Advanced Oral Pathology (1.0 FCE)
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

° Course that may continue over a program. The course is graded or credit is given when completed.

Dentistry: Dentistry MSc (Oral and Maxillofacial Pathology and Oral Medicine Specialty)

MSc Program (Oral and Maxillofacial Pathology and Oral Medicine Specialty)

Program Description

The Dentistry MSc, Oral and Maxillofacial Pathology and Oral Medicine specialization is a four-year full-time program. The specialty in Oral and Maxillofacial Pathology and Oral Medicine is concerned with the diagnosis, nature, and primarily non-surgical management of oral, maxillofacial, and temporomandibular diseases and disorders, including dental management of patients with medical complications.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.
Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Oral and Maxillofacial Pathology and Oral Medicine Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Year 2:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Oral and Maxillofacial Pathology and Oral Medicine, complete 5.5 FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - LMP1300Y General and Special Pathology (1.0 FCE)
    - Begin thesis research (RST 9999Y)
  - Year 2:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1011Y Advanced Seminars in Oral Pathology
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - Continue with thesis research (RST9999Y)
  - Year 3:
    - DEN1011Y Advanced Seminars in Oral Pathology
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
    - Continue with thesis research (RST9999Y)
  - Year 4:
    - DEN1011Y Advanced Seminars in Oral Pathology (1.0 FCE)
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

13 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S/F/W/S)

Time Limit

5 years full-time

Course that may continue over a program. The course is graded or credit is given when completed.

MSc Program (Oral and Maxillofacial Pathology and Oral Medicine Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Year 2:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Oral and Maxillofacial Pathology and Oral Medicine, complete 5.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - LMP1300Y General and Special Pathology (1.0 FCE)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Year 2:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1011Y Advanced Seminars in Oral Pathology
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - Oral defence of the written thesis (RST9999Y).
Year 3:
- DEN1011Y0 Advanced Seminars in Oral Pathology
- DEN1012Y0 Oral Medicine
- DEN1013Y0 Oral Surgical Pathology

Year 4:
- DEN1011Y0 Advanced Seminars in Oral Pathology (1.0 FCE)
- DEN1012Y0 Oral Medicine (1.0 FCE)
- DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
- Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

13 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S/F/W/S)

Time Limit

5 years full-time

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
  - Years 1 and 2:
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).

- In the specialty of Oral and Maxillofacial Radiology, complete 9.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
    - DEN1017H++ Temporomandibular Disorders (0.5 FCE)
    - DEN1094Y Advanced Oral and Maxillofacial Radiology I (1.0 FCE)
    - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
    - Begin thesis research (RST9999Y)
    - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
  - Year 2:
    - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1095Y Advanced Oral and Maxillofacial Radiology II (1.0 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit)
    - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
    - Clinical and Experimental Radiobiology modules taken through the Department of Radiation Oncology in the Temerty Faculty of Medicine (0.0 FCE)
    - Continue with thesis research (RST9999Y)
  - Year 3:
    - DEN1096Y Advanced Oral and Maxillofacial Radiology III (1.0 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Dentistry: Dentistry MSc (Oral and Maxillofacial Radiology Specialty)

MSc Program (Oral and Maxillofacial Radiology Specialty)

Program Description

The Dentistry MSc, Oral and Maxillofacial Radiology specialty is a three-year full-time program. The specialty in Oral and Maxillofacial Radiology is concerned with the prescription, production, and interpretation of diagnostic images of diseases and disorders of the craniofacial complex.

Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty. Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Oral and Maxillofacial Radiology Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.

- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Notes:

- Course that may continue over a program. The course is graded or credit is given when completed.

- The specialty in Oral and Maxillofacial Radiology, complete 9.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Continue with thesis research (RST9999Y)
- Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
- Clinical and Experimental Radiobiology modules taken through the Department of Radiation Oncology in the Temerty Faculty of Medicine (0.0 FCE)
- Oral defence of the written thesis (RST9999Y).

- Residency. Students must be on campus and participating for the duration of their registration in the program.
Program Length

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

Course that may continue over a program. The course is graded or credit is given when completed.

Course is offered in alternate years.

MSc Program (Oral and Maxillofacial Radiology Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
  - Years 1 and 2:
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Oral and Maxillofacial Radiology, complete 9.0 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
- Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
    - DEN1017H++ Temporomandibular Disorders (0.5 FCE)
    - DEN1094Y Advanced Oral and Maxillofacial Radiology I (1.0 FCE)
    - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
    - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Year 2:
    - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1095Y Advanced Oral and Maxillofacial Radiology II (1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit)
    - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
    - Clinical and Experimental Radiobiology modules taken through the Department of Radiation Oncology in the Temerty Faculty of Medicine (0.0 FCE)
  - Year 3:
    - DEN1096Y Advanced Oral and Maxillofacial Radiology III (1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
    - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Dentistry: Dentistry MSc (Oral and Maxillofacial Surgery Specialty)

Program Description

The Dentistry MSc, Oral and Maxillofacial Surgery specialty is a four-year full-time program. The specialty in Oral and Maxillofacial Surgery is concerned with and includes the diagnosis and surgical and adjunctive treatment of disorders, diseases, injuries, and defects, involving the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial regions and related structures. Clinical activities are based primarily at Mt. Sinai Hospital, Sunnybrook Health Sciences Centre, Humber River Hospital, and The Hospital for Sick Children. There is also additional participation at other University-affiliated teaching centres: Holland Bloorview Kids...
Rehabilitation, Lakeview Health, and the Rouge Valley Health Network.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty. Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Oral and Maxillofacial Surgery Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
  - **Year 2:**
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
- In the specialty of Oral and Maxillofacial Surgery, complete 20.5 required FCEs as follows. Students have the option to take DEN1008H Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE) or continue with thesis research (RST9999Y), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- **Year 1:**
  - DEN1002H Oral Pathology (0.5 FCE)
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1013Y0 Oral Surgical Pathology
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - Begin thesis research (RST9999Y)
- **Year 2:**
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - Continue with thesis research (RST9999Y)
- **Year 3:**
  - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3004Y Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck (1.0 FCE)
  - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
- **Year 4:**
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - Oral defence of the written thesis (RST9999Y).
- **Year 5:**
  - Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

13 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S/F/W/S/F/W/S/F)

Time Limit

5 years full-time

Course that may continue over a program. The course is graded or credit is given when completed.

MSc Program (Oral and Maxillofacial Surgery Specialty): Coursework-Only Option

Minimum Admission Requirements
Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.

- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)

- In the specialty of Oral and Maxillofacial Surgery, complete 20.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Year 1:
  - DEN1002H Oral Pathology (0.5 FCE)
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1013Y Oral Surgical Pathology
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)

- Year 2:
  -DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  -DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  -DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)

- Year 3:
  -DEN1013Y Oral Surgical Pathology (1.0 FCE)
  -DEN2005Y Surgical Orthodontics (1.0 FCE)

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

13 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S/F/W/S)

Time Limit

5 years full-time

0 Course that may continue over a program. The course is graded or credit is given when completed.

Dentistry: Dentistry MSc (Oral Medicine Specialty)

MSc Program (Oral Medicine Specialty)

Program Description

The Dentistry MSc, Oral Medicine specialty is a three-year full-time program. The specialty in Oral Medicine focuses on nonsurgical management of oral diseases including the management of oral mucosal and salivary gland diseases, temporomanibular disorders, and orofacial pain, the oral complications of systemic disease, and dental management of medically complex patients.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.
MSc Program (Oral Medicine Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Oral Medicine, complete a total of 3.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - Begin thesis research (RST9999Y)
  - Year 2:
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
  - Year 3:
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

- Course that may continue over a program. Credit is given when the course is completed.

MSc Program (Oral Medicine Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 1, 2, and 3:
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Oral Medicine, complete a total of 3.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Year 2:
    - DEN1012Y Oral Medicine
    - DEN1013Y Oral Surgical Pathology
  - Year 3:
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time
Course that may continue over a program. The course is graded or credit is given when the course is completed.

Dentistry: Dentistry MSc (Orthodontics and Dentofacial Orthopedics Specialty)

MSc Program (Orthodontics and Dentofacial Orthopedics Specialty)

Program Description

The Dentistry MSc, Orthodontics and Dentofacial Orthopedics specialty is a three-year full-time program. The specialty in Orthodontics and Dentofacial Orthopedics is concerned with the supervision, guidance, and correction of the growing or mature dentofacial structures and the diagnosis, prevention, and treatment of any abnormalities associated with these structures.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

MSc Program (Orthodontics and Dentofacial Orthopedics Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 1, 2, and 3:
    - DEN1001Y° Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the specialty of Orthodontics and Dentofacial Orthopedics, complete 15.5 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

Year 1:
- DEN1007H Oral Radiology (0.5 FCE)
- DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
- DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
- DEN2001Y Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning (1.0 FCE)
- DEN2005Y Surgical Orthodontics (1.0 FCE)
- DEN2006Y Facial Growth and Facial Analysis (1.0 FCE)
- DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
- DEN2010H Tissue Reaction to Orthodontic and Orthopedic Forces (0.5 FCE)
- PDE9094Y° Clinical Conferences (Credit/No Credit)
- Begin thesis research (RST9999Y)

Year 2:
- DEN1016H++ Occlusion: Function and Dysfunction (0.5 FCE)
- DEN1017H++ Temporomandibular Disorders (0.5 FCE)
- DEN2002Y Orthodontics 2: Biomechanics, Orthodontic Technique, and Practice Administration (1.0 FCE)
- DEN2005Y Surgical Orthodontics (1.0 FCE)
- DEN2007Y++ Craniofacial Anomalies (1.0 FCE)
- DEN2009H Classic Theories of Craniofacial Growth (0.5 FCE)
- DEN2011Y Craniofacial Morphology and Development (1.0 FCE)
- PDE9094Y° Clinical Conferences (Credit/No Credit)
- Continue with thesis research (RST9999Y)

Year 3:
- DEN2003Y Orthodontics 3: Orthodontic Technique and Clinical Practice (1.0 FCE)
- DEN2004Y Orthodontics 4: Interceptive Orthodontics (1.0 FCE)
- DEN2005Y Surgical Orthodontics (1.0 FCE)
- PDE9094Y° Clinical Conferences (Credit/No Credit; 1.0 FCE)
- Oral defence of the written thesis (RST9999Y).

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

++ Course is offered in alternate years.
MSc Program (Orthodontics and Dentofacial Orthopedics): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 1, 2, and 3:**
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Orthodontics and Dentofacial Orthopedics, complete 15.5 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 1:**
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
    - DEN2001Y Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning (1.0 FCE)
    - DEN2005Y Surgical Orthodontics (1.0 FCE)
    - DEN2006Y Facial Growth and Facial Analysis (1.0 FCE)
    - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
    - DEN2010H Tissue Reaction to Orthodontic and Orthopedic Forces (0.5 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - **Year 2:**
    - DEN1016H Occlusion: Function and Dysfunction (0.5 FCE)
    - DEN1017H Temporomandibular Disorders (0.5 FCE)
    - DEN2002Y Orthodontics 2: Biomechanics, Orthodontic Technique, and Practice Administration (1.0 FCE)
    - DEN2005Y Surgical Orthodontics (1.0 FCE)
    - DEN2007Y Craniofacial Anomalies (1.0 FCE)
- **Year 3:**
  - DEN2003Y Orthodontics 3: Orthodontic Technique and Clinical Practice (1.0 FCE)
  - DEN2004Y Orthodontics 4: Interceptive Orthodontics (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.

Residency: Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

Program Description

The Dentistry MSc, Pediatric Dentistry specialty is a three-year full-time program. Pediatric dentists provide primary and comprehensive preventive and therapeutic oral health diagnosis, care, and consultative expertise for infants and children through adolescence, including those of all ages with special care needs. The didactic program is centered at the Faculty of Dentistry, while the clinical program will be divided between the Faculty of Dentistry, the University-affiliated teaching hospitals and community-based Toronto Public Health dental clinic.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.
MSc Program (Pediatric Dentistry Specialty):
Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Year 3:**
    - DEN1001Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the specialty of Pediatric Dentistry, complete 17.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 1:**
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1003H Preventive Dentistry (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1062H Pharmacology of Dental Therapeutics (0.0 FCE)
    - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
    - **Year 2:**
      - DEN1070H Advances in Dental Materials Science (0.5 FCE)
      - DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry
      - DEN4002Y Pediatric Dentistry 2: Journal Review
      - DEN4008Y Pediatric Orthodontics
      - DEN4013Y Clinical Pediatric Dentistry II (Credit/No Credit; 1.0 FCE)
      - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
      - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry (1.0 FCE)
    - DEN4002Y Pediatric Dentistry 2: Journal Review (1.0 FCE)
    - DEN4008Y Pediatric Orthodontics (1.0 FCE)
    - DEN4014Y Clinical Pediatric Dentistry III (Credit/No Credit; 1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

Course that may continue over a program. The course is graded or credit is given when completed.

Course is offered in alternate years.

MSc Program (Pediatric Dentistry Specialty):
Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 17.0 full-course equivalents (FCEs) as follows:
  - **Year 1:**
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN2007Y Craniofacial Anomalies (1.0 FCE)
    - DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry
    - DEN4002Y Pediatric Dentistry 2: Journal Review (1.0 FCE)
    - DEN4003Y Pediatric Dentistry 3: Facial and Dental Growth and Development in Pediatric Dentistry (1.0 FCE)
    - DEN4004H Pediatric Dentistry 4: Child Behaviour Management (0.5 FCE)
    - DEN4006Y Pediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Pediatric Dentistry (1.0 FCE)
    - DEN4007H Pediatric Dentistry 7: Therapy and Trauma (0.5 FCE)
    - DEN4008Y Pediatric Orthodontics
    - DEN4009Y Pediatrics II (1.0 FCE)
    - DEN4010Y Pediatric Medicine and Hospital Dentistry (1.0 FCE)
  - **Year 2:**
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1062H Pharmacology of Dental Therapeutics (0.0 FCE)
    - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
    - **Year 3:**
      - DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry (1.0 FCE)
      - DEN4002Y Pediatric Dentistry 2: Journal Review (1.0 FCE)
      - DEN4008Y Pediatric Orthodontics (1.0 FCE)
      - DEN4014Y Clinical Pediatric Dentistry III (Credit/No Credit; 1.0 FCE)
      - Oral defence of the written thesis (RST9999Y).
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

Course that may continue over a program. The course is graded or credit is given when completed.

Course is offered in alternate years.
Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Year 3:**
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
- In the **specialty of Pediatric Dentistry**, complete 17.0 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 1:**
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1003H Preventive Dentistry (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1062H Pharmacology of Dental Therapeutics (0.0 FCE)
    - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
    - DEN2007Y++ Craniofacial Anomalies (1.0 FCE)
    - DEN4001Y0 Pediatric Dentistry 1: Theoretical Pediatric Dentistry
    - DEN4002Y0 Pediatric Dentistry 2: Journal Review
    - DEN4008Y0 Pediatric Orthodontics
    - DEN4010Y0 Pediatric Medicine and Hospital Dentistry (1.0 FCE)
    - DEN4011Y0 Conscious Sedation and Anaesthesia in Pediatric Dentistry (1.0 FCE)
    - DEN4012Y0 Clinical Pediatric Dentistry II (Credit/No Credit; 1.0 FCE)
  - **Year 2:**
    - DEN1070H++ Advances in Dental Materials Science (0.5 FCE)
    - DEN4001Y0 Pediatric Dentistry 1: Theoretical Pediatric Dentistry
    - DEN4002Y0 Pediatric Dentistry 2: Journal Review
    - DEN4008Y0 Pediatric Orthodontics
    - DEN4013Y Clinical Pediatric Dentistry II (Credit/No Credit; 1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - **Year 3:**
    - DEN4001Y0 Pediatric Dentistry 1: Theoretical Pediatric Dentistry (1.0 FCE)
    - DEN4002Y0 Pediatric Dentistry 2: Journal Review (1.0 FCE)
    - DEN4008Y0 Pediatric Orthodontics (1.0 FCE)
    - DEN4014Y Clinical Pediatric Dentistry III (Credit/No Credit; 1.0 FCE)
    - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

\* Course that may continue over a program. The course is graded or credit is given when completed.

\*\* Course is offered in alternate years.

Dentistry: Dentistry MSc (Periodontics Specialty)

MSc Program (Periodontics Specialty)

Program Description

The Dentistry MSc, Periodontics specialty is a three-year full-time program. The specialty in Periodontics is concerned with the diagnosis, prevention, and treatment of diseases and conditions of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function, and aesthetics of these structures and tissues.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty.

Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.
MSc Program (Periodontics Specialty): Thesis-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
    - DEN1001Y* Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
  - In the specialty of Periodontics, complete 17.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 2:**
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1033Y Periodontology: Seminars and Clinics I (1.0 FCE)
    - DEN1036Y* Literature Review in Periodontology (1.0 FCE)
    - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
    - DEN1070H** Advances in Dental Materials Science (0.5 FCE)
    - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
    - Begin thesis research (RST9999Y)
  - **Year 3:**
    - Continue with thesis research (RST9999Y)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - DEN1035Y Periodontology: Seminars and Clinics III (1.0 FCE)
    - DEN1037Y Clinical Case Presentations (1.0 FCE)
    - DEN1038Y Biomaterials and Implant/Reconstructive Dentistry (1.0 FCE)
    - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
    - Oral defence of the written thesis (RST9999Y).
  - Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

0 Course that may continue over a program. The course is graded or credit is given when completed.

** Course is offered in alternate years.

MSc Program (Periodontics Specialty): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
    - DEN1001Y* Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
  - In the specialty of Periodontics, complete 17.0 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE) as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - **Year 2:**
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1022H Investigating Pathogenic Biofilms (0.5 FCE)
    - DEN1034Y Periodontology: Seminars and Clinics II (1.0 FCE)
    - DEN1036Y* Literature Review in Periodontology (1.0 FCE)
    - DEN1037Y Clinical Case Presentations (1.0 FCE)
    - DEN1038Y Biomaterials and Implant/Reconstructive Dentistry (1.0 FCE)
    - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
    - DEN1091Y Parenteral Moderate Sedation for Dental Procedures (Credit/No Credit; 1.0 FCE)
    - PDE9094Y* Clinical Conferences (Credit/No Credit)
FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- **Year 1:**
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1033Y Periodontology: Seminars and Clinics I (1.0 FCE)
  - DEN1036Y0 Literature Review in Periodontology
  - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
  - DEN1070H++ Advances in Dental Materials Science (0.5 FCE)
  - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
  - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
- **Year 2:**
  - DEN1002H Oral Pathology (0.5 FCE)
  - DEN1022H Investigating Pathogenic Biofilms (0.5 FCE)
  - DEN1034Y Periodontology: Seminars and Clinics II (1.0 FCE)
  - DEN1036Y0 Literature Review in Periodontology (1.0 FCE)
  - DEN1037Y Clinical Case Presentations (1.0 FCE)
  - DEN1038Y Biomaterials and Implant/Reconstructive Dentistry (1.0 FCE)
  - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
  - DEN1091Y Parenteral Moderate Sedation for Dental Procedures (Credit/No Credit; 1.0 FCE)
  - PDE9094Y0 Clinical Conferences (Credit/No Credit)
- **Year 3:**
  - DEN1013Y Oral Surgical Pathology (1.0 FCE)
  - DEN1035Y Periodontology: Seminars and Clinics III (1.0 FCE)
  - DEN1037Y Clinical Case Presentations (1.0 FCE)
  - DEN1038Y Biomaterials and Implant/Reconstructive Dentistry (1.0 FCE)
  - DEN1039Y Principles and Practice of Periodontology (1.0 FCE)
  - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Prepare a research practicum (DEN1061H; 0.5 FCE); successfully complete an oral examination.

- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

Program Length

10 sessions full-time (typical registration sequence: S/F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

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**Dentistry: Dentistry MSc (Prosthodontics Specialty)**

**MSc Program (Prosthodontics Specialty)**

**Program Description**

The Dentistry MSc program, Prosthodontics specialty is a three-year full-time program. The specialty in Prosthodontics is concerned with the diagnosis, restoration, and maintenance of oral function, comfort, appearance, and health of the patient by the restoration of the natural teeth and/or the replacement of missing teeth and contiguous oral and maxillofacial tissues with artificial substitutes.

Upon completion of all program requirements, students are eligible for the MSc degree and certification in the chosen dental specialty. Note: coursework-only students are ineligible to enrol in the PhD in Dentistry program at a later date.

**MSc Program (Prosthodontics Specialty): Thesis-Only Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Doctor of Dental Surgery (DDS) or an equivalent degree with at least a B+ standing (3.3 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

**Program Requirements**

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Year 3:**
    - DEN1001Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Prosthodontics, complete 18.0 required FCEs as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

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++ Course is offered in alternate years.

© Course that may continue over a program. The course is graded or credit is given when completed.
Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Year 1:
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1016H** Occlusion: Function and Dysfunction (0.5 FCE)
  - DEN1017H** Temporomandibular Disorders (0.5 FCE)
  - DEN1041Y Prosthodontics I: Prosthodontic Treatment Planning and Case Presentations (1.0 FCE)
  - DEN1042Y Prosthodontics II: Key Concepts in Prosthodontics and Laboratory Management (1.0 FCE)
  - DEN1043Y Prosthodontics III: Prosthodontic Topical Seminars (1.0 FCE)
  - DEN1044Y Prosthodontics IV: Prosthodontic Current Literature (1.0 FCE)
  - DEN1045Y Prosthodontics V: Critical Appraisal of the Literature in Prosthodontics and Surgery (1.0 FCE)
  - DEN1046Y® Clinical Prosthodontics
  - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
  - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (0.5 FCE)
  - DEN3005H Head and Neck Anatomy (0.5 FCE)
  - Begin thesis research (RST9999Y)

- Year 2:
  - DEN1041Y Prosthodontics I: Prosthodontic Treatment Planning and Case Presentations (1.0 FCE)
  - DEN1043Y Prosthodontics III: Prosthodontic Topical Seminars (1.0 FCE)
  - DEN1044Y Prosthodontics IV: Prosthodontic Current Literature (1.0 FCE)
  - DEN1045Y Prosthodontics V: Critical Appraisal of the Literature in Prosthodontics and Surgery (1.0 FCE)
  - DEN1046Y® Clinical Prosthodontics
  - DEN1070H** Advances in Dental Materials Sciences (0.5 FCE)
  - Continue with thesis research (RST9999Y)

- Year 3:
  - DEN1041Y Prosthodontics I: Prosthodontic Treatment Planning and Case Presentations (1.0 FCE)
  - DEN1043Y Prosthodontics III: Prosthodontic Topical Seminars (1.0 FCE)
  - DEN1044Y Prosthodontics IV: Prosthodontic Current Literature (1.0 FCE)
  - DEN1046Y® Clinical Prosthodontics (1.0 FCE)
  - PDE9094Y® Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Oral defence of the written thesis (RST9999Y).

- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)
Dentistry: Dentistry PhD (Dental Biomedical Sciences Field)

Program Description

The Dentistry PhD, Dental Biomedical Sciences field is intended for those whose career goal is to work at the forefront of their field in oral health sciences as an independent research scientist in an academic, governmental, or industrial setting. Completion of the PhD may take longer than the indicated program length below.

PhD Program (Dental Biomedical Sciences)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to a PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university. Students may also be admitted with an appropriate master’s degree in a discipline appropriate to the intended field of doctoral study.

Program Requirements

- Students undertake customized programs, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 required full-course equivalents (FCEs), 2.0 elective FCEs, and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit)
    - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
  - **Year 2:**
    - Continue with DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit)
    - 2.0 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice

Program Length

9 sessions full-time (typical registration sequence: F/W/S/F/W/S/F/W/S)

Time Limit

4 years full-time

- Course that may continue over a program. The course is graded or credit is given when completed.
- Course is offered in alternate years.
Successfully pass a **qualifying oral examination** between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.

- Continue with thesis research (RST9999Y)
  - **Year 3:**
    - Continue with DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 4:**
    - Complete any outstanding coursework
    - Continue with thesis research (RST9999Y)
  - **Year 5:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- **Residency.** Students must meet a minimum residency requirement of one year, though it is the Faculty of Dentistry’s expectation that students will normally remain on campus for four years.

**Program Length**

- 5 years

**Time Limit**

- 7 years

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### PhD Program (Dental Biomedical Sciences): Transfer

**Transfer Requirements**

- Highly qualified MSc students may be considered for transfer to the PhD program. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

**Program Requirements**

- Students undertake customized programs, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs), 2.0 elective FCEs, and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit)
    - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
  - **Year 2:**
    - Continue with DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit)
    - 2.0 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - Successfully pass a **transfer examination** between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
  - **Year 3:**
    - Continue with DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 4:**
    - Complete any outstanding coursework
    - Continue with thesis research (RST9999Y)
  - **Year 5:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.

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### Program Length

- 5 years

### Time Limit

- 7 years

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Dentistry: Dentistry PhD (Dental Anaesthesia Specialty)

Program Description

The PhD program, Dental Anaesthesia specialty is a six-year full-time program. The specialty in Dental Anaesthesia is designed to prepare dentists with a full range of sedation and anaesthetic techniques for dental patients, with the focus on deep sedation and general anaesthesia. The teaching facilities for this program are provided by the combined resources of Dental Anaesthesia in the Faculty of Dentistry and the Department of Anaesthesia in the Temerty Faculty of Medicine. Training is given both at the Faculty of Dentistry and at teaching hospitals affiliated with the University.

Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

PhD Program (Dental Anaesthesia Specialty)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1055H Basic Principles of Anaesthesia (0.5 FCE)
    - DEN1056Y Basic Concepts in Clinical Medicine (1.0 FCE)
    - DEN1072Y Dental Anaesthesia Graduate Seminars (1.0 FCE)
    - DEN1074Y Foundations of Medicine as Applied to Dental Anaesthesia (1.0 FCE)
    - DEN1076H+ General Anaesthesia for Medical Procedures — Adult I (0.5 FCE)
    - DEN1078H+ General Anaesthesia for Dental Procedures — Adult I (0.5 FCE)
    - DEN1084H+ Experiences in Clinical Teaching I (Credit/No Credit; 0.5 FCE)
    - DEN1087Y Fundamentals of Dental Anaesthesia (1.0 FCE)
  - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
  - Year 2:
    - DEN1052Y General Anaesthesia for Medical Procedures — Pediatric (1.0 FCE)
    - DEN1071H+ Medical Anaesthesia Seminars I (Credit/No Credit; 0.5 FCE)
    - DEN1083Y Experiences in Clinical Medicine I (1.0 FCE)
    - DEN1085H+ Experiences in Clinical Teaching II (Credit/No Credit; 0.5 FCE)
    - DEN1088Y Fundamentals of Dental Anaesthesia II (1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit)
    - Continue with thesis research (RST9999Y)
  - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
  - Year 3:
    - DEN1072H+ Medical Anaesthesia Seminars II (Credit/No Credit; 0.5 FCE)
    - DEN1075Y General Anaesthesia for Dental Procedures — Pediatric (1.0 FCE)
    - DEN1077H General Anaesthesia for Medical Procedures — Adult II
    - DEN1079H+ General Anaesthesia for Dental Procedures — Adult II (0.5 FCE)
    - DEN1086H+ Experiences in Clinical Teaching III (Credit/No Credit; 0.5 FCE)
    - DEN1089Y Fundamentals of Dental Anaesthesia III (1.0 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
  - Years 4 and 5:
    - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - Complete any outstanding core or specialty-specific coursework
  - Continue with thesis research (RST9999Y)
  - Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
• Participate in all graduate research activities of the advisor’s research group.
• Present at meetings and publish original research findings in a timely fashion.
• Participate as a member of departmental and student committees as applicable.
• **Residency.** Students must be on campus and participating for the duration of their registration in the program.

### Program Length

6 years

### Time Limit

8 years

0 Course that may continue over a program. The course is graded or credit is given when completed.

#### PhD Program (Dental Anaesthesia Specialty): Transfer

##### Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the PhD in Dentistry in the specialty of Dental Anaesthesia. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

##### Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of **2.0 full-course equivalents (FCEs) and a thesis** as follows:
  - **Year 1:**
    - DEN1010H **Research Ethics** (Credit/No Credit; 0.5 FCE)
    - DEN1015H **Introduction to Biostatistics** (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1100Y **Seminars in Oral Health Sciences** (Credit/No Credit; 1.0 FCE).
- In the specialty of Dental Anaesthesia, complete **15.5 required FCEs and 1.0 elective FCE** as follows:
  - **Year 1:**
    - DEN1014H **Clinical Epidemiology and Evidence-Based Care** (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1052Y **General Anaesthesia for Medical Procedures — Pediatric** (1.0 FCE)
    - DEN1071Y **Fundamentals of Medicine as Applied to Dental Anaesthesia** (1.0 FCE)
    - DEN1083Y **Clinical Conferences** (Credit/No Credit)
    - **Years 4 and 5:**
      - **Fundamentals of Dental Anaesthesia** (1.0 FCE)
      - DEN1088Y **Basic Principles of Anaesthesia** (0.5 FCE)
      - DEN1055H **Basic Concepts in Clinical Medicine** (1.0 FCE)
      - DEN1056Y **Medical Anaesthesia Seminars I** (Credit/No Credit; 0.5 FCE)
      - DEN1073Y **General Anaesthesia for Medical Procedures — Adult I** (0.5 FCE)
      - DEN1076H **General Anaesthesia for Dental Procedures — Adult I** (0.5 FCE)
      - DEN1084H **Experiences in Clinical Teaching I** (Credit/No Credit; 0.5 FCE)
      - **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

• Participate in all graduate research activities of the advisor’s research group.
• Present at meetings and publish original research findings in a timely fashion.
• Participate as a member of departmental and student committees as applicable.
• **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

6 years

**Time Limit**

8 years

0 Course that may continue over a program. The course is graded or credit is given when completed.

**Dentistry: Dentistry PhD (Dental Public Health Specialty)**

**Program Description**

The Dentistry PhD, Dental Public Health specialty is a five-year full-time program. This specialty consists of core subjects, with optional subjects chosen by students in consultation with the program director. Courses are given by the Faculty of Dentistry as well as other units, such as the Dalla Lana School of Public Health and the Institute of Health Policy, Management and Evaluation.

Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

**PhD Program (Dental Public Health Specialty)**

**Minimum Admission Requirements**

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Dentistry’s additional admission requirements stated below.
• Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

**Program Requirements**

• Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
• Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  o **Year 1:**
    • DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    • DEN1015H Introduction to Biostatistics (0.5 FCE)
  o **Years 2 and 3:**
    • DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
• In the specialty of Dental Public Health, complete 7.0 required FCEs and 1.0 elective FCE as follows:
  o **Year 1:**
    • CHL5004H Introduction to Public Health Sciences (0.5 FCE)
    • DEN1003H Preventive Dentistry (0.5 FCE)
    • DEN1006Y Seminars in Dental Public Health (1.0 FCE)
    • DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    • DEN1051Y Oral Epidemiology (1.0 FCE)
    • DEN1063Y Practicum in Dental Public Health (1.0 FCE)
    • PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
  o Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
  o **Year 2:**
    • DEN1064H Management Principles in Canadian Dental Health Organizations (0.5 FCE)
    • 0.5 FCE chosen in the area of health policy or health economics based on the student’s clinical or research interests
    • 0.5 FCE chosen in the area of public health based on the student’s clinical or research interests
    • Continue with thesis research (RST9999Y)
    • Successfully pass a qualifying oral examination between 12 to 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
  o **Years 3 and 4:**
    • 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    • Complete any outstanding core or specialty-specific coursework
    • Continue with thesis research (RST9999Y)
  o **Year 5:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
• Participate in all graduate research activities of the advisor’s research group.
• Present at meetings and publish original research findings in a timely fashion.
• Participate as a member of departmental and student committees as applicable.
• **Residency.** Students must be on campus and participating for the duration of their registration in the program.
Program Length

5 years

Time Limit

7 years

0 Course that may continue over a program. The course is graded or credit is given when completed.

PhD Program (Dental Public Health Specialty):
Transfer

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Dental Public Health. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student's coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - Year 5: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
    - Participate in all graduate research activities of the advisor's research group.
    - Present at meetings and publish original research findings in a timely fashion.
    - Participate as a member of departmental and student committees as applicable.
    - Residency. Students must be on campus and participating for the duration of their registration in the program.

- Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
- Year 2:
  - DEN1064H Management Principles in Canadian Dental Health Organizations (0.5 FCE)
  - 0.5 FCE chosen in the area of health policy or health economics based on the student's clinical or research interests
  - 0.5 FCE chosen in the area of public health based on the student's clinical or research interests
  - Continue with thesis research (RST9999Y)
  - Successfully pass a transfer examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
- Years 3 and 4:
  - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Complete any outstanding core or specialty-specific coursework
  - Continue with thesis research (RST9999Y)
- Year 5: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
  - Participate in all graduate research activities of the advisor's research group.
  - Present at meetings and publish original research findings in a timely fashion.
  - Participate as a member of departmental and student committees as applicable.

Dentistry: Dentistry PhD (Endodontics Specialty)

Program Description

The Dentistry PhD, Endodontics specialty is a six-year full-time program. This specialty is designed to provide students with opportunities to acquire excellent clinical skills and comprehension of the underlying biology. Its components include: patient care, providing all aspects of endodontic treatment; topic-specific and current literature seminars; clinical conferences; core curriculum courses; rotation programs; research at the MSc level, including application for funding,
preparation of manuscripts for publication, presentation at national and international research forums; and guest lectures. Students must complete a dental clinic rotation as part of the Endodontics specialty requirements.

Great emphasis is placed on self-learning in all of the program’s components. Students are encouraged to identify research topics, related to endodontic science or any other dental or non-dental scientific area. Through continual updating of courses and research schedules, the program aims to achieve a balanced platform of excellent specialty education and committed service to patients. Students are encouraged to join the Ontario Society of Endodontists, the Canadian Academy of Endodontics, and the American Association of Endodontists.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

PhD Program (Endodontics Specialty)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Endodontics, complete 18.0 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Year 1:
  - DEN1002H Oral Pathology (0.5 FCE)
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1062H Pharmacology of Dental Therapeutics (0.5 FCE)
  - DEN1070H Advances in Dental Materials Science (0.5 FCE)
  - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
  - DEN3005H Head and Neck Anatomy (0.5 FCE)
  - DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
  - DEN5002Y Graduate Endodontics Topical Literature (1.0 FCE)
  - DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
  - DEN5005H Introduction to Graduate Endodontics (0.5 FCE)
  - PDE9091Y Endodontic Clinic (1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit)
  - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)

- Year 2:
  - DEN1022H Investigating Pathogenic Biofilms (0.5 FCE)
  - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
  - DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
  - DEN5002Y Graduate Endodontics Topical Literature (1.0 FCE)
  - DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
  - DEN5004Y Single Tooth Replacement with Implant Supported Prosthesis
  - PDE9091Y Endodontic Clinic (1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
  - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.

- Years 3 to 5:
  - DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
  - DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
  - DEN5004Y Single Tooth Replacement with Implant Supported Prosthesis (1.0 FCE)
  - PDE9091Y Endodontic Clinic (1.0 FCE)
  - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Complete any outstanding core or specialty-specific coursework
  - Continue with thesis research (RST9999Y)
Program Length

6 years

Time Limit

8 years

Course that may continue over a program. The course is graded or credit is given when completed.

Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Course is offered in alternate years.

PhD Program (Endodontics Specialty): Transfer

Transfer Requirements

Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Endodontics. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student's coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:

- Year 1:
  - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
  - DEN1015H Introduction to Biostatistics (0.5 FCE)
- Years 2 and 3:
  - DEN1002H Oral Pathology (0.5 FCE)
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1062H Pharmacology of Dental Therapeutics (0.5 FCE)
  - DEN1070H++ Advances in Dental Materials Science (0.5 FCE)
  - DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
  - DEN3005H Head and Neck Anatomy (0.5 FCE)
  - DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
  - DEN5002Y Graduate Endodontics Topical Literature (1.0 FCE)
  - DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
  - DEN5005Y Graduate Endodontics Seminar (1.0 FCE)

Consider for transfer to the Dentistry PhD in the specialty of Endodontics. MSc students who transfer to the PhD must fulful the admission requirements listed under the PhD program and successfully complete the transfer examination.

Student's coursework and research programs, approve the thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)

Year 2:

- DEN1022H Investigating Pathogenic Biofilms (0.5 FCE)
- DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
- DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
- DEN5002Y Graduate Endodontics Topical Literature (1.0 FCE)
- DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
- DEN5004Y Single Tooth Replacement with Implant Supported Prosthesis (1.0 FCE)
- PDE9091Y Endodontic Clinic (1.0 FCE)
- PDE9094Y Clinical Conferences (Credit/No Credit)
- Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)

Year 3 to 5:

- DEN5001Y Graduate Endodontics Case Presentations (1.0 FCE)
- DEN5003Y Graduate Endodontics Current Literature (1.0 FCE)
- DEN5004Y Single Tooth Replacement with Implant Supported Prosthesis (1.0 FCE)
- Continue with thesis research (RST9999Y)
- Successfully pass a transfer examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
PDE9091Y Endodontic Clinic (1.0 FCE)
1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
Complete any outstanding core or specialty-specific coursework
Continue with thesis research (RST9999Y)

- **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

### Program Length

6 years

### Time Limit

8 years

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**Course that may continue over a program. The course is graded or credit is given when completed.**

**Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.**

**Course is offered in alternate years.**

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## Dentistry: Dentistry PhD (Oral and Maxillofacial Pathology Specialty)

### Program Description

The Dentistry PhD, Oral and Maxillofacial Pathology specialty is a six-year full-time program. The specialty in Oral and Maxillofacial Pathology focuses on the identification and management of diseases of the oral and maxillofacial regions through microscopic, clinical, biochemical, or other forms of examination. Oral and Maxillofacial Pathology includes histopathologic analysis of tissue samples, the investigation of, causes, and effects of diseases.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

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### PhD Program (Oral and Maxillofacial Pathology Specialty)

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

#### Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Year 2 and 3:**
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
    - **Year 2 and 3:**
      - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE).
    - **Year 2 and 3:**
      - DEN1002H Oral Pathology (0.5 FCE)
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1011Y Seminars in Advanced Oral Pathology
      - DEN1013Y Oral Surgical Pathology
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - Continue with thesis research (RST9999Y)
      - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
    - **Year 3:**
      - DEN1011Y Seminars in Advanced Oral Pathology (1.0 FCE)
Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  
  - **Years 2 and 3:**
    - DEN1100Y^0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  
  - **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination. Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

PhD Program (Oral and Maxillofacial Pathology Specialty): Transfer

Transfer Requirements

- Highly qualified MSc students, who are in the thesis option of the MSc program, may be considered for transfer to the Dentistry PhD in the specialty of Oral and Maxillofacial Pathology. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Length

- **6 years**

Time Limit

- **8 years**

^0 Course that may continue over a program. The course is graded or credit is given when completed.
PhD Program (Oral and Maxillofacial Pathology and Oral Medicine Specialty)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Dentistry's additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
    - In the specialty of Oral and Maxillofacial Pathology and Oral Medicine, complete 5.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H). In addition to the total FCEs required for the specialty.
      - **Year 1:**
        - LMP1300Y General and Special Pathology (1.0 FCE)
        - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
      - **Year 2:**
        - DEN1002H Oral Pathology (0.5 FCE)
        - DEN1007H Oral Radiology (0.5 FCE)
        - DEN1011Y Seminars in Advanced Oral Pathology
        - DEN1012Y Oral Medicine
        - DEN1013Y Oral Surgical Pathology
        - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
        - Continue with thesis research (RST9999Y)
        - Successfully pass a qualifying oral examination within 12 to 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
      - **Year 3:**
        - DEN1011Y Seminars in Advanced Oral Pathology (1.0 FCE)
        - DEN1012Y Oral Medicine (1.0 FCE)
        - DEN1013Y Oral Surgical Pathology (1.0 FCE)
        - Continue with thesis research (RST9999Y)
      - **Year 4:**
        - DEN1011Y Seminars in Advanced Oral Pathology (1.0 FCE)
        - DEN1012Y Oral Medicine (1.0 FCE)
        - DEN1013Y Oral Surgical Pathology (1.0 FCE)
        - Continue with thesis research (RST9999Y)
      - **Years 5 and 6:**
        - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
        - Complete any outstanding core or specialty-specific coursework
        - Continue with thesis research (RST9999Y)
      - **Year 7:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
  - Participate in all graduate research activities of the advisor’s research group.
  - Present at meetings and publish original research findings in a timely fashion.
  - Participate as a member of departmental and student committees as applicable.
  - Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length

7 years
Time Limit

9 years

° Course that may continue over a program. The course is graded or credit is given when completed.

PhD Program (Oral and Maxillofacial Pathology and Oral Medicine Specialty)

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Endodontics. MSc students who transfer to the PhD must fulfil the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student's coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1000Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the specialty of Oral and Maxillofacial Pathology and Oral Medicine, complete 5.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
    - Year 1:
      - LMP1300Y General and Special Pathology (1.0 FCE)
      - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable).
    - Year 2:
      - DEN1002H Oral Pathology (0.5 FCE)
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1011Y Seminars in Advanced Oral Pathology
      - DEN1012Y Oral Medicine
      - DEN1013Y Oral Surgical Pathology
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - Continue with thesis research (RST9999Y)
      - Successfully pass a transfer examination within 12 to 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
  - Year 3:
    - DEN1011Y Seminars in Advanced Oral Pathology (1.0 FCE)
    - DEN1012Y Oral Medicine (1.0 FCE)
    - DEN1013Y Oral Surgical Pathology (1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - Years 5 and 6:
    - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - Complete any outstanding core or specialty-specific coursework
    - Continue with thesis research (RST9999Y)
  - Year 7: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Time Limit

7 years

Program Length

9 years

° Course that may continue over a program. The course is graded or credit is given when completed.

Dentistry: Dentistry PhD (Oral and Maxillofacial Radiology Specialty)

Program Description

The Dentistry PhD, Oral and Maxillofacial Radiology specialty, is a six-year full-time program. The specialty in Oral and Maxillofacial Radiology is concerned with the prescription, production, and interpretation of diagnostic images of diseases and disorders of the craniofacial complex.
Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

**PhD Program (Oral and Maxillofacial Radiology Specialty)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

**Program Requirements**

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1100Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the specialty of Oral and Maxillofacial Radiology, complete 9.0 required FCEs and 1.0 elective FCE as follows. Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
    - **Year 1:**
      - DEN1002H Oral Pathology (0.5 FCE)
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1013Y0 Oral Surgical Pathology
      - DEN1017H** Temporomandibular Disorders (0.5 FCE)
      - DEN1094Y Advanced Oral and Maxillofacial Radiology I (1.0 FCE)
      - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
      - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
    - **Year 2:**
      - DEN1100Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
      - DEN1015Y0 Clinical Conferences (Credit/No Credit; 0.5 FCE)
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - DEN1045Y0 Clinical Conferences (Credit/No Credit; 0.5 FCE)
    - **Year 3:**
      - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
      - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
      - Continue with thesis research (RST9999Y)
    - **Year 4 and 5:**
      - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
      - Complete any outstanding core or specialty-specific coursework
      - Continue with thesis research (RST9999Y)
    - **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

6 years

**Time Limit**

8 years

\(^0\) Course that may continue over a program. The course is graded or credit is given when completed.

\(^**\) Course is offered in alternate years.
**PhD Program (Oral and Maxillofacial Radiology Specialty): Transfer**

**Transfer Requirements**

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Oral and Maxillofacial Radiology. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

**Program Requirements**

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of **2.0 full-course equivalents (FCEs)** and a **thesis** as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN100Y0 Seminars in Oral Health Sciences (1.0 FCE)
    - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
  - In the **specialty of Oral and Maxillofacial Radiology**, complete **9.0 required FCEs** and **1.0 elective FCE** as follows. Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
    - **Year 1:**
      - DEN1002H Oral Pathology (0.5 FCE)
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1013Y0 Oral Surgical Pathology
      - DEN1017H++ Temporomandibular Disorders (0.5 FCE)
      - DEN1094Y Advanced Oral and Maxillofacial Radiology I (1.0 FCE)
      - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
      - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
      - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
    - **Year 2:**
      - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - DEN1015H Introduction to Biostatistics (0.5 FCE)
      - DEN1095Y Advanced Oral and Maxillofacial Radiology II (1.0 FCE)
      - PDE9094Y0 Clinical Conferences (Credit/No Credit)
      - Mi Applied Physics modules taken through the Department of Medical Imaging in the Temerty Faculty of Medicine (0.0 FCE)
      - Clinical and Experimental Radiobiology modules taken through the Department of Radiation Oncology in the Temerty Faculty of Medicine (0.0 FCE)
      - Continue with thesis research (RST9999Y)
      - Successfully pass a **transfer examination** within 12 to 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
    - **Year 3:**
      - DEN1096Y Advanced Oral and Maxillofacial Radiology III (1.0 FCE)
      - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
      - Continue with thesis research (RST9999Y)
    - **Years 4 and 5:**
      - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
      - Complete any outstanding core or specialty-specific coursework
      - Continue with thesis research (RST9999Y)
    - **Year 6:** Successfully submit and defend the thesis at the **Doctoral Final Oral Examination**.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

- **6 years**

**Time Limit**

- **8 years**

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**Dentistry: Dentistry PhD (Oral and Maxillofacial Surgery Specialty)**

**Program Description**

The Dentistry PhD, Oral and Maxillofacial Surgery specialty is a seven-year full-time program. The specialty in Oral and Maxillofacial Surgery is concerned with and includes the
diagnosis and surgical and adjunctive treatment of disorders, diseases, injuries, and defects, involving the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial regions and related structures. Clinical activities are based primarily at Mt. Sinai Hospital, Sunnybrook Health Sciences Centre, Humber River Hospital, and The Hospital for Sick Children. There is also additional participation at other University-affiliated teaching centres: Holland Bloorview Kids Rehabilitation, Lakeview Health, and the Rouge Valley Health Network.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

PhD Program (Oral and Maxillofacial Surgery Specialty)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Oral and Maxillofacial Surgery, complete 20.5 required FCEs and 1.0 elective FCE as follows:
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
  - Year 2:
    - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - Year 3:
    - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
    - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3004Y Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck (1.0 FCE)
    - DEN3007H Head and Neck Anatomy (0.5 FCE)
    - PDE9094Y0 Clinical Conferences (Credit/No Credit)
    - Principles of Surgery module taken through the Department of Surgery in the Temerty Faculty of Medicine (0.0 FCE)
  - Year 4:
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1013Y0 Oral Surgical Pathology
    - DEN2005Y Surgical Orthodontics (1.0 FCE)
    - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
    - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3004Y Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck (1.0 FCE)
    - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
- Continue with thesis research (RST9999Y)
- Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
- Year 2:
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - Continue with thesis research (RST9999Y)
- Year 3:
  - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3004Y Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck (1.0 FCE)
  - PDE9094Y0 Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
- Year 4:
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
  - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
  - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
  - Continue with thesis research (RST9999Y)
Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of 2.0 course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)

- Students must successfully complete a total of 20.5 required FCEs and 1.0 elective FCE as follows:
  - **Year 1:**
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1013Y Oral Surgical Pathology
    - DEN2005Y Surgical Orthodontics (1.0 FCE)
    - DEN3001Y Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease (1.0 FCE)
    - DEN3002Y Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3003Y Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery (1.0 FCE)
    - DEN3004Y Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck (1.0 FCE)
    - DEN3005H Head and Neck Anatomy (0.5 FCE)
    - PDE9094Y Clinical Conferences (Credit/No Credit)
    - Principles of Surgery module taken through the Department of Surgery in the Temerty Faculty of Medicine (0.0 FCE)
  - **Year 2 and 3:**
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the specialty of Oral and Maxillofacial Surgery, complete 20.5 required FCEs and 1.0 elective FCE as follows: Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

- **Year 7:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
  - Participate in all graduate research activities of the advisor’s research group.
  - Present at meetings and publish original research findings in a timely fashion.
  - Participate as a member of departmental and student committees as applicable.
  - **Residency.** Students must be on campus and participating for the duration of their registration in the program.

Program Length

7 years

Time Limit

9 years

0 Course that may continue over a program. The course is graded or credit is given when completed.
Dentistry: Dentistry PhD (Oral Medicine Specialty)

Program Description

The Dentistry PhD, Oral Medicine specialty is a six-year full-time program. The specialty in Oral Medicine focuses on nonsurgical management of oral diseases including the management of oral mucosal and salivary gland diseases, temporomandibular disorders, and orofacial pain, the oral complications of systemic disease, and dental management of medically complex patients.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the specialty of Oral Medicine, complete 3.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
    - Year 1:
      - DEN1002H Oral Pathology (0.5 FCE)
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1012Y Oral Medicine
      - DEN1013Y Oral Surgical Pathology
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
    - Year 2:
      - DEN1012Y Oral Medicine
      - DEN1013Y Oral Surgical Pathology
      - Continue with thesis research (RST9999Y)
      - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
    - Year 3:
      - DEN1012Y Oral Medicine (1.0 FCE)
      - DEN1013Y Oral Surgical Pathology (1.0 FCE)
      - Continue with thesis research (RST9999Y)
    - Years 4 and 5:
      - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
Complete any outstanding core or specialty-specific coursework.
Continue with thesis research (RST9999Y)

- Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.

Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length
6 years

Time Limit
8 years

Course that may continue over a program. The course is graded or credit is given when completed.

PhD Program (Oral Medicine Specialty): Transfer

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Oral Medicine. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y0 Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Oral Medicine, complete 3.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
  - Year 1:
    - DEN1002H Oral Pathology (0.5 FCE)
    - DEN1007H Oral Radiology (0.5 FCE)
    - DEN1012Y0 Oral Medicine
    - DEN1013Y0 Oral Surgical Pathology
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
  - Year 2:
    - DEN1012Y0 Oral Medicine
    - DEN1013Y0 Oral Surgical Pathology
    - Continue with thesis research (RST9999Y)
  - Year 3:
    - DEN1012Y0 Oral Medicine (1.0 FCE)
    - DEN1013Y0 Oral Surgical Pathology (1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - Years 4 and 5:
    - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - Complete any outstanding core or specialty-specific coursework
  - Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length
6 years

Time Limit
8 years

Course that may continue over a program. The course is graded or credit is given when completed.
Dentistry: Dentistry PhD (Orthodontics and Dentofacial Orthopedics Specialty)

Program Description

The Dentistry PhD, Orthodontics and Dentofacial Orthopedics specialty is a six-year full-time program. The specialty in Orthodontics and Dentofacial Orthopedics is concerned with the supervision, guidance, and correction of the growing or mature dentofacial structures and the diagnosis, prevention, and treatment of any abnormalities associated with these structures.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

PhD Program (Orthodontics and Dentofacial Orthopedics Specialty)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry's additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student's coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
    - DEN1007H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
  - **Year 2 and 3:**
    - DEN1100Y* Seminars in Oral Health Sciences (1.0 FCE)
  - In the specialty of Orthodontics and Dentofacial Orthopedics, complete 15.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take
    - DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total
  - FCEs required for the specialty.
- Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.
- **Year 1:**
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
  - DEN2001Y Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN2006Y Facial Growth and Facial Analysis (1.0 FCE)
  - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
  - DEN2010H Tissue Reaction to Orthodontic and Orthopedic Forces (0.5 FCE)
  - PDE9094Y* Clinical Conferences (Credit/No Credit)
  - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
- **Year 2:**
  - DEN1016H** Occlusion: Function and Dysfunction (0.5 FCE)
  - DEN1017H** Temporomandibular Disorders (0.5 FCE)
  - DEN2002Y Orthodontics 2: Biomechanics, Orthodontic Technique, and Practice Administration (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN2007Y** Craniofacial Anomalies (1.0 FCE)
  - DEN2009H Classic Theories of Craniofacial Growth (0.5 FCE)
  - DEN2011Y Craniofacial Morphology and Development (1.0 FCE)
  - Continue with thesis research (RST9999Y)
  - Successfully pass a qualifying oral examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.
- **Year 3:**
  - DEN2003Y Orthodontics 3: Orthodontic Technique and Clinical Practice (1.0 FCE)
  - DEN2004Y Orthodontics 4: Interceptive Orthodontics (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - PDE9094Y* Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
- **Years 4 and 5:**
  - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Complete any outstanding core or field-specific coursework
  - Continue with thesis research (RST9999Y)
- **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
- Participate in all graduate research activities of the advisor's research group.
- Present at meetings and publish original research findings in a timely fashion.

*Applicable course

**Credit/No Credit
- Participate as a member of departmental and student committees as applicable.
- Residency: Students must be on campus and participating for the duration of their registration in the program.

Program Length

6 years

Time Limit

8 years

Course that may continue over a program. The course is graded or credit is given completed.

Course is offered in alternate years.

PhD Program (Orthodontics and Dentofacial Orthopedics Specialty): Transfer

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Orthodontics and Dentofacial Orthopedics. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y² Seminars in Oral Health Sciences (1.0 FCE)
  - In the specialty of Orthodontics and Dentofacial Orthopedics, complete 15.5 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Year 1:
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1060H Oral Physiology: Sensory and Neuromuscular Function (0.5 FCE)
  - DEN2001Y Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN2006Y Facial Growth and Facial Analysis (1.0 FCE)
  - DEN2008Y Craniofacial Anatomy and Osteology (1.0 FCE)
  - DEN2010H Tissue Reaction to Orthodontic and Orthopedic Forces (0.5 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit)
  - Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)

- Year 2:
  - DEN1016H² Occlusion: Function and Dysfunction (0.5 FCE)
  - DEN1017H² Temporomandibular Disorders (0.5 FCE)
  - DEN2002Y Orthodontics 2: Biomechanics, Orthodontic Technique, and Practice Administration (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - DEN2007Y² Craniofacial Anomalies (1.0 FCE)
  - DEN2009H Classic Theories of Craniofacial Growth (0.5 FCE)
  - DEN2011Y Craniofacial Morphology and Development (1.0 FCE)
  - Continue with thesis research (RST9999Y)
  - Successfully pass a transfer examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.

- Year 3:
  - DEN2003Y Orthodontics 3: Orthodontic Technique and Clinical Practice (1.0 FCE)
  - DEN2004Y Orthodontics 4: Interceptive Orthodontics (1.0 FCE)
  - DEN2005Y Surgical Orthodontics (1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)

- Years 4 and 5:
  - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Complete any outstanding core or field-specific coursework
  - Continue with thesis research (RST9999Y)

- Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
• Residency. Students must be on campus and participating for the duration of their registration in the program.

Program Length
6 years

Time Limit
8 years

° Course that may continue over a program. The course is graded or credit is given when completed.

** Course is offered in alternate years.

Dentistry: Dentistry PhD (Pediatric Dentistry Specialty)
Doctor of Philosophy

Program Description
The Dentistry PhD, Pediatric Dentistry specialty is a six-year full-time program. Pediatric dentists provide primary and comprehensive preventive and therapeutic oral health diagnosis, care, and consultative expertise for infants and children through adolescence, including those of all ages with special care needs. The didactic program is centered at the Faculty of Dentistry, while the clinical program will be divided between the Faculty of Dentistry, the University-affiliated teaching hospitals and community-based Toronto Public Health dental clinic.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

PhD Program (Pediatric Dentistry Specialty)

Minimum Admission Requirements
• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.

• Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

Program Requirements

• Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

• Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  o Year 1:
    • DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    • DEN1015H Introduction to Biostatistics (0.5 FCE)
  o Years 2 and 3:
    • DEN1100Y° Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)

• In the specialty of Pediatric Dentistry, complete 17.0 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

  o Year 1:
    • DEN1002H Oral Pathology (0.5 FCE)
    • DEN1003H Preventive Dentistry (0.5 FCE)
    • DEN1007H Oral Radiology (0.5 FCE)
    • DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
    • DEN1062H Pharmacology of Dental Therapeutics (0.0 FCE)
    • DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.5 FCE)
    • DEN2007Y° Craniofacial Anomalies (1.0 FCE)
    • DEN4001Y° Pediatric Dentistry 1: Theoretical Pediatric Dentistry
    • DEN4002Y° Pediatric Dentistry 2: Journal Review
    • DEN4003Y Pediatric Dentistry 3: Facial and Dental Growth and Development in Pediatric Dentistry (1.0 FCE)
    • DEN4004H Pediatric Dentistry 4: Child Behaviour Management (0.5 FCE)
    • DEN4006Y Pediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Pediatric Dentistry (1.0 FCE)
    • DEN4007H Pediatric Dentistry 7: Therapy and Trauma (0.5 FCE)
    • DEN4008Y° Pediatric Orthodontics
    • DEN4009Y Pediatrics (1.0 FCE)
    • DEN4010Y Pediatric Medicine and Hospital Dentistry (1.0 FCE)
    • DEN4011Y Conscious Sedation and Anaesthesia in Pediatric Dentistry (1.0 FCE)
    • DEN4012Y Clinical Pediatric Dentistry I (Credit/No Credit; 1.0 FCE)
    • PD9094Y° Clinical Conferences (Credit/No Credit)

• Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)
  o Year 2:
Program Length

6 years

Time Limit

8 years

Course that may continue over a program. The course is graded or credit is given when completed.

Course is offered in alternate years.

PhD Program (Pediatric Dentistry Specialty): Transfer Option

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Pediatric Dentistry. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:

  Year 2 and 3:
  - DEN1001H Pediatric Dentistry 1: Theoretical Pediatric Dentistry (1.0 FCE)
  - DEN1002Y Pediatric Dentistry 2: Journal Review (1.0 FCE)
  - DEN1003H Pediatric Orthodontics (0.5 FCE)
  - DEN1007H Clinical Pediatric Dentistry I (Credit/No Credit; 1.0 FCE)
  - PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)

  Year 4 and 5:
  - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - Complete any outstanding core or field-specific coursework
  - Continue with thesis research (RST9999Y)

  Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- Residency. Students must be on campus and participating for the duration of their registration in the program.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

Year 1:
- DEN1002H Oral Pathology (0.5 FCE)
- DEN1003H Preventive Dentistry (0.5 FCE)
- DEN1007H Oral Radiology (0.5 FCE)
- DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
- DEN1062H Pharmacology of Dental Therapeutics (0.5 FCE)
- DEN1090H Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
- In the specialty of Pediatric Dentistry, complete 17.0 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
- **DEN4006Y Pediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Pediatric Dentistry (1.0 FCE)**
- **DEN4007H Pediatric Dentistry 7: Therapy and Trauma (0.5 FCE)**
- **DEN4008Y Pediatric Orthodontics**
- **DEN4009Y Pediatrics (1.0 FCE)**
- **DEN4010Y Pediatric Medicine and Hospital Dentistry (1.0 FCE)**
- **DEN4011Y Conscious Sedation and Anaesthesia in Pediatric Dentistry (1.0 FCE)**
- **DEN4012Y Clinical Pediatric Dentistry I (Credit/No Credit; 1.0 FCE)**
- **PDE9094Y Clinical Conferences (Credit/No Credit)**
- **Develop a thesis proposal, form a supervisory committee, and complete an ethics review (if applicable)**

**Year 2:**

- **DEN1070H** Advances in Dental Materials Science (0.5 FCE)
- **DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry**
- **DEN4002Y Pediatric Dentistry 2: Journal Review**
- **DEN4008Y Pediatric Orthodontics**
- **DEN4013Y Clinical Pediatric Dentistry II (Credit/No Credit; 1.0 FCE)**
- **PDE9094Y Clinical Conferences (Credit/No Credit; 1.0 FCE)**
- **Continue with thesis research (RST9999Y)**
- **Successfully pass a transfer examination between 12 and 24 months to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and their breadth of knowledge relative to the research project.**

**Year 3:**

- **DEN4001Y Pediatric Dentistry 1: Theoretical Pediatric Dentistry (1.0 FCE)**
- **DEN4002Y Pediatric Dentistry 2: Journal Review (1.0 FCE)**
- **DEN4008Y Pediatric Orthodontics (1.0 FCE)**
- **DEN4014Y Clinical Pediatric Dentistry III (Credit/No Credit; 1.0 FCE)**
- **Continue with thesis research (RST9999Y)**

**Years 4 and 5:**

- 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
- Complete any outstanding core or field-specific coursework
- **Continue with thesis research (RST9999Y)**

**Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.

- Participate in all graduate research activities of the advisor’s research group.
- Present at meetings and publish original research findings in a timely fashion.
- Participate as a member of departmental and student committees as applicable.
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

6 years

**Time Limit**

8 years

*Course that may continue over a program. The course is graded or credit is given when completed.*

*Course is offered in alternate years.*

**Dentistry: Dentistry PhD (Periodontics Specialty)**

**Program Description**

The Dentistry PhD, Periodontics specialty is a six-year full-time program. The specialty in Periodontics is concerned with the diagnosis, prevention, and treatment of diseases and conditions of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function, and aesthetics of these structures and tissues.

Students start the program in the Summer session. Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.

**PhD Program (Periodontics Specialty)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with a Doctor of Dental Surgery (DDS) or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university.

**Program Requirements**

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - **Year 1:**
In the **specialty of Periodontics**, complete **17.0 required FCEs and 1.0 elective FCE** as follows. Students have the option to take DEN1008H *Cone Beam CT Imaging* (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty. (Credit/No Credit; 1.0 FCE).

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

**Program Requirements**

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students' coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of **2.0 full-course equivalents (FCEs) and a thesis** as follows:

#### Year 1:
- **DEN1002H: Oral Pathology** (0.5 FCE)
- **DEN1022H: Investigating Pathogenic Biofilms** (0.5 FCE)
- **DEN1034Y: Periodontology: Seminars and Clinics I** (1.0 FCE)
- **DEN1036Y: Literature Review in Periodontology** (1.0 FCE)
- **DEN1091Y: Clinical Case Presentations** (1.0 FCE)
- **DEN1038Y: Biomaterials and Implant/Reconstructive Dentistry** (1.0 FCE)
- **DEN1039Y: Principles and Practice of Periodontology** (1.0 FCE)
- **DEN1070H: Advances in Dental Materials Science** (0.5 FCE)
- **DEN1090H: Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures** (Credit/No Credit; 0.5 FCE)

#### Year 2:
- **DEN1003Y: Oral Surgical Pathology** (1.0 FCE)
- **DEN1035Y: Periodontology: Seminars and Clinics III** (1.0 FCE)
- **DEN1037Y: Clinical Case Presentations** (1.0 FCE)
- **DEN1038Y: Biomaterials and Implant/Reconstructive Dentistry** (1.0 FCE)
- **DEN1039Y: Principles and Practice of Periodontology** (1.0 FCE)
- **DEN1091Y: Parenteral Moderate Sedation for Dental Procedures** (Credit/No Credit; 1.0 FCE)

#### Year 3:
- **DEN1010H: Research Ethics** (Credit/No Credit; 0.5 FCE)
- **DEN1015H: Introduction to Biostatistics** (0.5 FCE)

#### Years 2 and 3:
- **DEN1008H: Seminars in Oral Health Sciences** (Credit/No Credit; 1.0 FCE)
- **PDE9094Y: Clinical Conferences** (Credit/No Credit; 1.0 FCE)
- **Continue with thesis research (RST9999Y)**

#### Years 4 and 5:
- **1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice**
- **Complete any outstanding core or field-specific coursework**
- **Continue with thesis research (RST9999Y)**
- **Year 6: Successfully submit and defend the thesis at the Doctoral Final Oral Examination.**

- **Participate in all graduate research activities of the advisor’s research group.**
- **Present at meetings and publish original research findings in a timely fashion.**
- **Participate as a member of departmental and student committees as applicable.**
- **Residency.** Students must be on campus and participating for the duration of their registration in the program.

### PhD Program (Periodontics Specialty): Transfer

#### Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Periodontics. MSc students who transfer to the PhD must fulfill the admission requirements listed under the PhD program and successfully complete the transfer examination.

#### Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students' coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.

- Students must successfully complete a total of **2.0 full-course equivalents (FCEs) and a thesis** as follows:
In the specialty of Periodontics, complete 17.0 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- **Year 1:**
  - DEN1007H Research Ethics (Credit/No Credit; 0.5 FCE)
  - DEN1015H Introduction to Biostatistics (0.5 FCE)
- **Years 2 and 3:**
  - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- **Year 6:** Successfully submit and defend the thesis at the Doctoral Final Oral Examination.
  - Participate in all graduate research activities of the advisor’s research group.
  - Present at meetings and publish original research findings in a timely fashion.
  - Participate as a member of departmental and student committees as applicable.
  - **Residency.** Students must be on campus and participating for the duration of their registration in the program.

### Program Length

6 years

### Time Limit

8 years

\* Course that may continue over a program. The course is graded or credit is given when completed.

\++ Course is offered in alternate years.

### Dentistry: Dentistry PhD (Prosthodontics Specialty)

#### Program Description

The Dentistry PhD, Prosthodontics specialty is a six-year full-time program. This specialty is designed to prepare students for careers in the specialty of prosthodontics with particular emphasis on developing clinical teachers and researchers. Extensive clinical training is provided under close supervision in the Faculty of Dentistry Prosthodontics and the Implant Prosthodontic Unit. Strong surgical, communication, and interpersonal skills are developed in addition to the core prosthodontic skills.

Upon completion of all program requirements, students are eligible for the PhD degree and certification in the chosen field of dental specialty. Program completion will be contingent upon completion of all requirements for the research and specialty training components of the program.
Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Dentistry’s additional admission requirements stated below.
- Students are normally admitted to the PhD program with an appropriate master’s degree, or equivalent, with at least an A– standing (3.7 out of 4.0 grade point average [GPA]) in the final year from a recognized university in a discipline appropriate to the intended field of doctoral study.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange the student’s coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of 2.0 full-course equivalents (FCEs) and a thesis as follows:
  - Year 1:
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - Years 2 and 3:
    - DEN1100Y+ Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
- In the specialty of Prosthodontics, complete 18.0 required FCEs and 1.0 elective FCE as follows. Students have the option to take DEN1007H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.

Note: course timing may vary between years. Please contact gradstudies@dentistry.utoronto.ca for details.

- Year 1:
  - DEN1007H Oral Radiology (0.5 FCE)
  - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
  - DEN1016H+ Occlusion: Function and Dysfunction (0.5 FCE)
  - DEN1017H+ Temporomandibular Disorders (0.5 FCE)
  - DEN1041Y Prosthodontics I: Prosthodontic Treatment Planning and Case Presentations (1.0 FCE)
  - DEN1042Y Prosthodontics II: Key Concepts in Prosthodontics and Laboratory Management (1.0 FCE)
  - DEN1043Y Prosthodontics III: Prosthodontic Topical Seminars (1.0 FCE)
  - DEN1044Y Prosthodontics IV: Prosthodontic Current Literature (1.0 FCE)
  - DEN1045Y Prosthodontics V: Critical Appraisal of the Literature in Prosthodontics and Surgery (1.0 FCE)
  - DEN1046Y+ Clinical Prosthodontics

Program Length

6 years
Time Limit

8 years

Course that may continue over a program. The course is graded or credit is given when completed.

** Course is offered in alternate years.

PhD Program (Prosthodontics Specialty): Transfer

Transfer Requirements

- Highly qualified MSc students in the thesis option may be considered for transfer to the Dentistry PhD in the specialty of Prosthodontics. MSc students who transfer to the PhD must fulfil the admission requirements listed under the PhD program and successfully complete the transfer examination.

Program Requirements

- Students undertake a customized program, approved by an advisory committee and the Associate Dean, Graduate Education, comprising advanced study and original research culminating in the defence of a thesis. After consultation with the Associate Dean, Graduate Education, a committee will be appointed to plan and arrange students’ coursework and research programs, approve the course of study, and monitor progress as part of an annual report to the Associate Dean for approval and continuance of candidacy.
- Students must successfully complete a total of **2.0 full-course equivalents (FCEs)** and a **thesis** as follows:
  - **Year 1:**
    - DEN1010H Research Ethics (Credit/No Credit; 0.5 FCE)
    - DEN1015H Introduction to Biostatistics (0.5 FCE)
  - **Years 2 and 3:**
    - DEN1100Y Seminars in Oral Health Sciences (Credit/No Credit; 1.0 FCE)
  - In the **specialty of Prosthodontics**, complete **18.0 required FCEs** and **1.0 elective FCE** as follows. Students have the option to take DEN1008H Cone Beam CT Imaging (Credit/No Credit; 0.25 FCE; prerequisite: DEN1007H), in addition to the total FCEs required for the specialty.
    - **Year 1:**
      - DEN1007H Oral Radiology (0.5 FCE)
      - DEN1014H Clinical Epidemiology and Evidence-Based Care (0.5 FCE)
      - DEN1016H** Occlusion: Function and Dysfunction (0.5 FCE)
      - DEN1017H** Temporomandibular Disorders (0.5 FCE)
      - DEN1041Y Prosthodontics I: Prosthodontic Treatment Planning and Case Presentations (1.0 FCE)
      - DEN1042Y Prosthodontics II: Key Concepts in Prosthodontics and Laboratory Management (1.0 FCE)
  - **Year 2:**
    - DEN1043Y Prosthodontics III: Prosthodontic Topical Seminars (1.0 FCE)
    - DEN1044Y Prosthodontics IV: Prosthodontic Current Literature (1.0 FCE)
  - **Year 3:**
    - DEN1045Y Prosthodontics V: Critical Appraisal of the Literature in Prosthodontics and Surgery (1.0 FCE)
    - DEN1046Y** Clinical Prosthodontics
    - DEN1070H** Advances in Dental Materials Sciences (0.5 FCE)
    - Continue with thesis research (RST9999Y)
    - Successfully pass a transplant examination to demonstrate an adequate capacity for oral health sciences research through previous work. Students will be examined on their thesis proposal and breadth of knowledge relative to the research project.
  - **Year 4 and 5:**
    - 1.0 elective FCE in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - Complete any outstanding core or field-specific coursework
    - Continue with thesis research (RST9999Y)
  - **Year 6:** Successfully submit and defend the thesis at the **Doctoral Final Oral Examination**.
    - Participate in all graduate research activities of the advisor’s research group.
    - Present at meetings and publish original research findings in a timely fashion.
    - Participate as a member of departmental and student committees as applicable.
    - **Residency.** Students must be on campus and participating for the duration of their registration in the program.
Program Length
6 years

Time Limit
8 years

Course that may continue over a program. The course is graded or credit is given when completed.

Course is offered in alternate years.

Dentistry: Dentistry MSc, PhD Courses

Not all courses are offered every year. The Faculty of Dentistry should be consulted each session as to course offerings. Required courses vary by specialty. Please contact the Graduate Department for details.

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>DEN1001Y</td>
<td>Seminars in Oral Health Sciences (Credit/No Credit)</td>
</tr>
<tr>
<td>DEN1010H</td>
<td>Research Ethics (Credit/No Credit)</td>
</tr>
<tr>
<td>DEN1015H</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>DEN1100Y</td>
<td>Seminars in Oral Health Sciences (Credit/No Credit)</td>
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</table>

Course that may continue over a program. Credit is given when the course is completed.

General Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>DEN1014H</td>
<td>Clinical Epidemiology and Evidence-Based Care (co-requisite: DEN1015H)</td>
</tr>
<tr>
<td>DEN1022H</td>
<td>Investigating Pathogenic Biofilms</td>
</tr>
<tr>
<td>DEN1060H</td>
<td>Oral Physiology: Sensory and Neuromuscular Function</td>
</tr>
<tr>
<td>DEN1070H</td>
<td>Advances in Dental Materials Science</td>
</tr>
<tr>
<td>DEN1080Y</td>
<td>Biology of Connective Tissues</td>
</tr>
<tr>
<td>DEN1081H</td>
<td>Bone Interfacing Implants</td>
</tr>
<tr>
<td>DEN1098H</td>
<td>Reading Course in Oral Health Sciences</td>
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</table>

Courses for Students in MSc or PhD Dental Specialties

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHL5004H</td>
<td>Introduction to Public Health Sciences</td>
</tr>
<tr>
<td>DEN1002H</td>
<td>Oral Pathology</td>
</tr>
<tr>
<td>DEN1003H</td>
<td>Preventive Dentistry</td>
</tr>
<tr>
<td>DEN1006Y</td>
<td>Seminars in Dental Public Health</td>
</tr>
<tr>
<td>DEN1007H</td>
<td>Oral Radiology</td>
</tr>
<tr>
<td>DEN1008H</td>
<td>Cone Beam CT Imaging (Credit/No Credit) (prerequisite: DEN1007H)</td>
</tr>
<tr>
<td>DEN1011Y</td>
<td>Seminars in Advanced Oral Pathology</td>
</tr>
<tr>
<td>DEN1012Y</td>
<td>Oral Medicine (operates as a regular, non-continuous course for students in the Oral and Maxillofacial Pathology specialty)</td>
</tr>
<tr>
<td>DEN1013Y</td>
<td>Oral Surgical Pathology (operates as a regular, non-continuous course for students in the Periodontics specialty)</td>
</tr>
<tr>
<td>DEN1014H</td>
<td>Clinical Epidemiology and Evidence-Based Care</td>
</tr>
<tr>
<td>DEN1016H</td>
<td>Occlusion: Function and Dysfunction</td>
</tr>
<tr>
<td>DEN1017H</td>
<td>Temporomandibular Disorders</td>
</tr>
<tr>
<td>DEN1022H</td>
<td>Investigating Pathogenic Biofilms</td>
</tr>
<tr>
<td>DEN1033Y</td>
<td>Periodontology: Seminars and Clinics I</td>
</tr>
<tr>
<td>DEN1034Y</td>
<td>Periodontology: Seminars and Clinics II</td>
</tr>
<tr>
<td>DEN1035Y</td>
<td>Periodontology: Seminars and Clinics III</td>
</tr>
<tr>
<td>DEN1036Y</td>
<td>Literature Review in Periodontology</td>
</tr>
<tr>
<td>DEN1037Y</td>
<td>Clinical Case Presentations</td>
</tr>
<tr>
<td>DEN1038Y</td>
<td>Biomaterials and Implant/Reconstructive Dentistry</td>
</tr>
<tr>
<td>DEN1039Y</td>
<td>Principles and Practice of Periodontology</td>
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<tr>
<td>DEN1041Y</td>
<td>Prosthodontics I: Prosthodontic Treatment Planning</td>
</tr>
<tr>
<td>DEN1042Y</td>
<td>Prosthodontics II: Restorative Dentistry</td>
</tr>
<tr>
<td>DEN1043Y</td>
<td>Prosthodontics III: Patients With the Partially Edentulous Mouth and Advanced Prosthodontic Care</td>
</tr>
<tr>
<td>DEN1044Y</td>
<td>Prosthodontics IV: Patients With the Fully Edentulous Mouth and Advanced Prosthodontic Care</td>
</tr>
<tr>
<td>DEN1045Y</td>
<td>Prosthodontics V: Critical Appraisal of the Literature</td>
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<tr>
<td>DEN1046Y</td>
<td>Clinical Prosthodontics</td>
</tr>
<tr>
<td>DEN1051Y</td>
<td>Oral Epidemiology</td>
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<tr>
<td>DEN1052Y</td>
<td>General Anaesthesia for Medical Procedures — Pediatric</td>
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<tr>
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<tr>
<td>DEN1053Y</td>
<td>General Anaesthesia for Medical Procedures — Adult</td>
</tr>
<tr>
<td>DEN1055H</td>
<td>Basic Principles of Dental Anaesthesia</td>
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<tr>
<td>DEN1056Y</td>
<td>Basic Concepts in Clinical Medicine</td>
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<tr>
<td>DEN1060H</td>
<td>Oral Physiology: Sensory and Neuromuscular Function</td>
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<tr>
<td>DEN1061H</td>
<td>Research Practicum</td>
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<tr>
<td>DEN1062H</td>
<td>Pharmacology of Dental Therapeutics</td>
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<tr>
<td>DEN1063Y</td>
<td>Practicum in Dental Public Health</td>
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<tr>
<td>DEN1064H</td>
<td>Management Principles in Canadian Dental Health Organizations</td>
</tr>
<tr>
<td>DEN1067H</td>
<td>Advances in Dental Materials Science</td>
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<tr>
<td>DEN1071H+</td>
<td>Medical Anaesthesia Seminars I (Credit/No Credit)</td>
</tr>
<tr>
<td>DEN1072H+</td>
<td>Medical Anaesthesia Seminars II (Credit/No Credit)</td>
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<tr>
<td>DEN1073Y</td>
<td>Dental Anaesthesia Graduate Seminars</td>
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<tr>
<td>DEN1074Y</td>
<td>Foundations of Medicine as Applied to Dental Anaesthesia</td>
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<tr>
<td>DEN1075Y</td>
<td>General Anaesthesia for Dentistry — Pediatric</td>
</tr>
<tr>
<td>DEN1076H+</td>
<td>General Anaesthesia for Medical Procedures — Adult I</td>
</tr>
<tr>
<td>DEN1077H+</td>
<td>General Anaesthesia for Medical Procedures — Adult II</td>
</tr>
<tr>
<td>DEN1078H+</td>
<td>General Anaesthesia for Dental Procedures — Adult I</td>
</tr>
<tr>
<td>DEN1079H+</td>
<td>General Anaesthesia for Dental Procedures — Adult II</td>
</tr>
<tr>
<td>DEN1083Y</td>
<td>Experiences in Clinical Medicine</td>
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<tr>
<td>DEN1084H+</td>
<td>Experiences in Clinical Teaching I (Credit/No Credit)</td>
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<tr>
<td>DEN1085H+</td>
<td>Experiences in Clinical Teaching II (Credit/No Credit)</td>
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<tr>
<td>DEN1086H+</td>
<td>Experiences in Clinical Teaching III (Credit/No Credit)</td>
</tr>
<tr>
<td>DEN1087Y</td>
<td>Fundamentals of Dental Anaesthesia</td>
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<tr>
<td>DEN1088Y</td>
<td>Fundamentals of Dental Anaesthesia II</td>
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<tr>
<td>DEN1089Y</td>
<td>Fundamentals of Dental Anaesthesia III</td>
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<tr>
<td>DEN1090H</td>
<td>Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit)</td>
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<tr>
<td>DEN1091Y</td>
<td>Parenteral Moderate Sedation for Dental Procedures (Credit/No Credit)</td>
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<td>DEN1094Y</td>
<td>Advanced Oral Radiology I (co-requisite: DEN1007H)</td>
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<td>DEN1095Y</td>
<td>Advanced Oral Radiology II (prerequisite: DEN1094Y)</td>
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<tr>
<td>DEN1096Y</td>
<td>Advanced Oral Radiology III (prerequisite: DEN1095Y)</td>
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<tr>
<td>DEN2001Y</td>
<td>Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning</td>
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<tr>
<td>DEN2002Y</td>
<td>Orthodontics 2: Biomechanics Orthodontic Technique and Practice Administration</td>
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<tr>
<td>DEN2003Y</td>
<td>Orthodontics 3: Orthodontic Technique and Clinical Practice</td>
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<tr>
<td>DEN2004Y</td>
<td>Orthodontics 4: Interceptive Orthodontics</td>
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<td>DEN2005Y</td>
<td>Surgical Orthodontics</td>
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<tr>
<td>DEN2006Y</td>
<td>Facial Growth and Facial Analysis</td>
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<tr>
<td>DEN2007Y</td>
<td>Craniofacial Anomalies</td>
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<td>DEN2008Y</td>
<td>Craniofacial Anatomy and Osteology</td>
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<td>DEN2009H</td>
<td>Classic Theories of Craniofacial Growth</td>
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<tr>
<td>DEN2010H</td>
<td>Tissue Reaction to Orthodontic and Orthopedic Forces</td>
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<td>DEN2011Y</td>
<td>Craniofacial Morphology and Development</td>
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<tr>
<td>DEN2001Y</td>
<td>Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease</td>
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<tr>
<td>DEN2003Y</td>
<td>Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery</td>
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<td>DEN2005Y</td>
<td>Head and Neck Anatomy</td>
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<td>DEN2001Y</td>
<td>Pediatric Dentistry 1: Theoretical Pediatric Dentistry</td>
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<td>DEN2002Y</td>
<td>Pediatric Dentistry 2: Journal Review</td>
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<td>DEN2003Y</td>
<td>Pediatric Dentistry 3: Facial and Dental Growth and Development in Pediatric Dentistry</td>
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<tr>
<td>DEN2004H</td>
<td>Pediatric Dentistry 4: Child Behaviour Management</td>
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<td>DEN2005Y</td>
<td>Pediatric Dentistry 5: Clinical Pediatric Dentistry</td>
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<td>DEN2006Y</td>
<td>Pediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Pediatric Dentistry</td>
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<td>DEN2007H</td>
<td>Pediatric Dentistry 7: Therapy and Trauma</td>
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<td>DEN2008Y</td>
<td>Pediatric Orthodontics</td>
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<td>DEN2009Y</td>
<td>Pediatrics</td>
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<td>DEN2010Y</td>
<td>Pediatric Medicine and Hospital Dentistry</td>
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<tr>
<td>DEN4011Y</td>
<td>Conscious Sedation and Anaesthesia in Pediatric Dentistry</td>
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<td>DEN4012Y</td>
<td>Clinical Pediatric Dentistry I (Credit/No Credit) (co-requisite: DEN1090H)</td>
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<td>DEN4013Y</td>
<td>Clinical Pediatric Dentistry II (Credit/No Credit) (co-requisite: DEN4012Y)</td>
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<td>DEN4014Y</td>
<td>Clinical Pediatric Dentistry III (Credit/No Credit) (co-requisite: DEN4013Y)</td>
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<tr>
<td>DEN5001Y</td>
<td>Graduate Endodontics Case Presentations</td>
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<tr>
<td>DEN5002Y</td>
<td>Graduate Endodontics Topical Literature</td>
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<tr>
<td>DEN5003Y</td>
<td>Graduate Endodontics Current Literature</td>
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<tr>
<td>DEN5004Y</td>
<td>Single Tooth Replacements with Implant-Supported Prosthesis</td>
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<tr>
<td>DEN5005H</td>
<td>Introduction to Graduate Endodontics</td>
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<td>LMP1300Y</td>
<td>General and Special Pathology</td>
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<td>PDE9091Y</td>
<td>Endodontic Clinic</td>
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<tr>
<td>PDE9094Y</td>
<td>Clinical Conferences (Credit/No Credit)</td>
</tr>
<tr>
<td>RST9999Y</td>
<td>Research/Thesis</td>
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</tbody>
</table>

^ Course that may continue over a program. The course is graded or credit is given when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Drama, Theatre and Performance Studies

Drama, Theatre and Performance Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Drama, Theatre and Performance Studies

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Diaspora and Transnational Studies
  - Drama, Theatre and Performance Studies, MA, PhD
- Jewish Studies
  - Drama, Theatre and Performance Studies, MA, PhD
- Knowledge Media Design
  - Drama, Theatre and Performance Studies, MA, PhD
- Sexual Diversity Studies
  - Drama, Theatre and Performance Studies, MA, PhD
- South Asian Studies
  - Drama, Theatre and Performance Studies, MA, PhD
- Women and Gender Studies
  - Drama, Theatre and Performance Studies, MA, PhD

Overview

The Centre for Drama, Theatre and Performance Studies offers graduate programs leading to the Master of Arts and Doctor of Philosophy degrees. The centre’s own core courses focus on the program fields of dramaturgy, theatre history, and theory of drama. Within the parameters of these fields, the centre supports research in such areas as performance analysis and reception; Canadian, American, international, and intercultural theatre; Elizabethan and Restoration staging practices; historiography and performance; acting and modern staging theories and practices; performance aesthetics and politics; as well as play and project development.

A new aspect in the curriculum focuses on the impact of digital culture on theatre practice and research. Through affiliations with other graduate units, students may also take courses in drama, theatre, and performance from other departments, centres, and institutes across the University. Graduate students build on the foundation that would normally be laid in undergraduate studies with a concentration in theatre, drama, and performance studies.

Performance practice is an integral part of graduate work in the centre and it takes place, for the most part, at the Robert Gill Theatre and the Luella Massey Studio Theatre.

For more information on application details, courses and faculty members, visit the departmental website.

Contact and Address

Web: [www.cdtps.utoronto.ca](http://www.cdtps.utoronto.ca)
General email: graduate.drama@utoronto.ca
Associate Director of Graduate Studies: gc.graddrama@utoronto.ca
Telephone: (416) 978-7980

Centre for Drama, Theatre and Performance Studies
University of Toronto
Koffler Student Services Centre
Room 325, 214 College Street
Toronto, Ontario M5T 2Z9
Canada

Drama, Theatre and Performance Studies: Graduate Faculty

Full Members

Budde, Antje - PhD
Cobb, Michael - BA, MA, AM, PhD
Copeland, Nancy - BA, MA, PhD
Fan, Xing - PhD [Associate Director]
Freeman, Barry - BA, MA, PhD
Gallagher-Ross, Jacob - BA, MFA, DFA
Gallagher, Kathleen Marie - PhD
Johnson, Stephen - BA, MA, PhD
Kieber, Pia - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Ross, Jill - BA, MA, PhD
Schotzko, T. Nikki Cesare - PhD
Sharma, Sarah - BA, MA, PhD
Switzky, Lawrence - BA, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Trojanowska, Tamara - MA, PhD [Director until Dec. 31, 2021]

Associate Members

Banjeree, Nileena - MEd
Barker, Roberta - PhD
Boye, Seika - PhD
Cervera, Felipe - PhD
Eacho, Douglas - PhD
Georgis, Dina - PhD
Goldstein, Tara - BA, PhD
Goonewardena, Kanishka - BSc, PhD, MCP
Hartblay, Cassandra Sarah - BA, MA, PhD
Heller, Lynne - PhD
Hemmasi, Farzaneh - PhD
Leffler, Elliot - BS, MA, PhD
Midgelow, Vida - PhD
Obradovic, Dragana - MA, PhD
Drama, Theatre and Performance Studies: Drama, Theatre and Performance Studies MA

Master of Arts

Program Description

The graduate program of the Centre for Drama, Theatre and Performance Studies is an interdisciplinary program that intersects research in the fields of drama, theatre and performance studies including research in dramatic literature, cross-cultural theory and histories of theatre and performance, conceptual and applied models of dramaturgy and methodologies of practice-based research. Graduating students will be well equipped to pursue doctoral studies, serve as innovative leaders in cultural institutions and the performing arts, or become creative entrepreneurs.

Based on faculty research, we offer support for studies in Canadian theatre; Indigenous and East Asian theatre; dance and physical theatre; popular theatre; cross-cultural communication through performance and media; studies of experimental and avant-garde theatre in North America, Asia, and Europe; early modern theatre and archival studies; queer and feminist performance theory, ethics, and equity in theatre and performance; theatre and globalization; and digital humanities in performance. In addition to courses in the program, students are encouraged to take advantage of cross-listed courses and research opportunities across the humanities, sciences and social sciences. Bi-linguality or multi-linguality is an asset as well as creative artistic experience and a developed level of digital literacy.

Students entering the MA program can choose between the coursework-only option and thesis-based option. Applicants interested in the part-time MA option should contact the Associate Director (graduate) to obtain specific information prior to application.

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies. Admissions are selective; possession of minimum qualifications does not guarantee acceptance. Applicants must also satisfy the Centre for Drama, Theatre and Performance Studies’ additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university with standing equivalent to at least a University of Toronto B+ and with a significant concentration in theatre, drama, performance, and related disciplines.
- Applications are open until late April and admission decisions are made on an ongoing basis. Applicants, in particular international applicants, are encouraged to apply early. Contact the Associate Director for further information.

Program Requirements

Coursework-Only Option

- Coursework. Students must complete a minimum of 4.0 full-course equivalents (FCEs), as approved by the Centre, as follows:
  - 1.5 FCEs in core courses, including
    - DRA1001H History and Historiography in Drama, Theatre and Performance Studies (0.5 FCE)
    - DRA1002H Graduate Laboratory in Drama, Theatre and Performance Studies (0.5 FCE)
    - DRA1003H Introduction to Drama, Theatre and Performance Studies (0.5 FCE)
  - 2.5 FCEs in electives.
- The Centre may prescribe certain courses in the individual programs of MA students.

Thesis-Based Option

- Students must complete a minimum of 4.0 full-course equivalents (FCEs), as approved by the Centre, as follows:
  - 1.5 FCEs in core courses, including
    - DRA1001H History and Historiography in Drama, Theatre and Performance Studies (0.5 FCE)
    - DRA1002H Graduate Laboratory in Drama, Theatre and Performance Studies (0.5 FCE)
    - DRA1003H Introduction to Drama, Theatre and Performance Studies (0.5 FCE)
  - 1.0 FCE: DRA1004Y MA Thesis under the supervision of the course instructor.
- The Centre may prescribe certain courses in the individual programs of MA students.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time
**Drama, Theatre and Performance Studies: Drama, Theatre and Performance Studies PhD**

**Doctor of Philosophy**

**Program Description**

The graduate program of the Centre for Drama, Theatre and Performance Studies is an interdisciplinary program that intersects research in the fields of drama, theatre and performance studies including research in dramatic literature, cross-cultural theory and histories of theatre and performance, conceptual and applied models of dramaturgy and methodologies of practice-based research. Graduating students will be well equipped to pursue academic careers, serve as innovative leaders in cultural institutions and the performing arts, or become creative entrepreneurs.

Based on faculty research, support is offered for studies in Canadian theatre; Indigenous and East Asian theatre; dance and physical theatre; popular theatre; cross-cultural communication through performance and media; studies of experimental and avant-garde theatre in North America, Asia, and Europe; early modern theatre and archival studies; queer and feminist performance theory, ethics, and equity in theatre and performance; theatre and globalization; and digital humanities in performance. In addition to courses in the program, students are encouraged to take advantage of cross-listed courses and research opportunities across the humanities, sciences, and social sciences. Bilinguality or multi-linguality is an asset as well as creative artistic experience and a developed level of digital literacy.

Applicants may be accepted into the PhD program via one of two routes: 1) following completion of an MA degree or 2) direct entry with a BA degree. The doctoral program is not available as a part-time option. The direct-entry option is a rare exception to the rule; interested applicants interested should contact the Associate Director (graduate) to obtain specific information prior to application.

**PhD Program**

**Minimum Admission Requirements**

- Applicants for admission to the Centre for Drama, Theatre and Performance Studies are considered under the General Regulations of the School of Graduate Studies. Admissions are selective; possession of minimum qualifications does not guarantee acceptance. Applicants must also satisfy the Centre's additional admission requirements stated below.
- Applications are open until late April and admission decisions are made on an ongoing basis. Applicants, in particular international applicants, are encouraged to apply early. Contact the Associate Director for further information.
- Applicants with a master of arts degree: an MA in Drama, Theatre and Performance Studies or the equivalent from a recognized university, must have a standing equivalent to at least a University of Toronto A–. Applicants who have taken the MA through this Centre must be recommended for further study by the instructors whose courses they have taken. Applicants holding the MA of this University in another subject or its equivalent from another university will be considered for admission to the PhD program in light of their previous work and its relation to the Centre's requirements; additional coursework may be required.
- Applicants must arrange two reference letters that address specifically their academic skills and research potential. Admission will be conditional upon satisfactory recommendation.
- Applications must be accompanied by a statement of research intent (up to 5 pages plus bibliography), writing sample (15 pages plus bibliography), and curriculum vitae (CV).

**Program Requirements**

- **Coursework.** Students must complete 4.0 approved full-course equivalents (FCEs) with an average standing of at least A–, including:
  - DRA1011H Sources and Concepts in Drama, Theatre, and Performance Studies I (0.5 FCE)
  - DRA1012H Sources and Concepts in Drama, Theatre, and Performance Studies II (0.5 FCE)
  - DRA1013H Modelling New Scholarship in Drama, Theatre, and Performance Studies (0.5 FCE)
  - DRA1014H Teaching and Learning in Drama, Theatre, and Performance Studies (0.5 FCE)
  - DRA5002H Research Development in Drama, Theatre, and Performance Studies (0.5 FCE).
- Demonstrate reading knowledge of a language other than English by passing an approved language examination no later than the end of Year 2. Students may also be asked to qualify in other program-related languages.
- Pass the field examination at the end of Year 2.
- Pass the prospectus defence at the beginning of Year 3.
- Present a thesis on an approved topic embodying the results of original investigation which shall be judged to constitute a significant contribution to the knowledge of the field.
- Pass an oral examination on the subject of the thesis.

**Program Length**

4 years (some students may take longer to complete the program)

**Time Limit**

6 years
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants for admission to the Centre for Drama, Theatre and Performance Studies are considered under the General Regulations of the School of Graduate Studies. Admissions are selective; possession of minimum qualifications does not guarantee acceptance. Applicants must also satisfy the Centre's additional admission requirements stated below.
- Applications received after January 15 may be too late for consideration. Contact the Associate Director for further information.
- Applicants with a bachelor of arts degree: exceptional students may be admitted to the PhD program (direct entry) from an appropriate BA from a recognized university with a minimum overall average equivalent to a University of Toronto A–. Applicants who do not qualify for direct entry into the PhD will be considered for the MA program.
- Applicants must arrange two reference letters, preferably from undergraduate instructors familiar with the applicant's academic work, that address specifically their academic skills and research potential. Admission will be conditional upon satisfactory recommendation.
- Applications must be accompanied by a statement of research intent (up to 5 pages plus bibliography), writing sample (15 pages plus bibliography), and curriculum vitae (CV).

Program Requirements

- **Coursework.** Students must complete 7.0 full-course equivalents (FCEs) with an average standing of at least A–, including:
  - DRA1011H Sources and Concepts in Drama, Theatre, and Performance Studies I (0.5 FCE)
  - DRA1012H Sources and Concepts in Drama, Theatre, and Performance Studies II (0.5 FCE)
  - DRA1013H Modelling New Scholarship in Drama, Theatre, and Performance Studies (0.5 FCE)
  - DRA1014H Teaching and Learning in Drama, Theatre, and Performance Studies (0.5 FCE)
  - DRA4031H Studies in Canadian Drama and Theatre
- Must maintain an A– average in their first 3.0 FCEs in order to continue in the program.
- Direct-entry students must take MA-level required courses based on consultations with the Director and the Associate Director, Graduate.
- With approval, may elect to transfer to the MA after the first year of study. Work completed in the PhD program will be credited towards the MA.
- Demonstrate reading knowledge of a language other than English by passing an approved language examination no later than the end of Year 2. Students may also be asked to qualify in other program-related languages.
- Pass the field examination at the end of Year 3.
- Pass the prospectus defence at the beginning of Year 4.
- Present a thesis on an approved topic embodying the results of original investigation which shall be judged to constitute a significant contribution to the knowledge of the field.
- Pass an oral examination on the subject of the thesis.

Program Length

5 years

Time Limit

7 years

Drama, Theatre and Performance Studies: Drama, Theatre and Performance Studies MA, PhD Courses

Not all courses listed will be offered every year. Registrants are advised to confirm course offerings by consulting the Centre's website, updated periodically through mid-summer, and by communicating with the Associate Director.

Core Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>DRA1001H</td>
<td>History and Historiography in Drama, Theatre, and Performance Studies</td>
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<td>DRA1002H</td>
<td>Graduate Laboratory in Drama, Theatre, and Performance Studies</td>
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<tr>
<td>DRA1003H</td>
<td>Introduction to Drama, Theatre, and Performance Studies</td>
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<tr>
<td>DRA1004Y</td>
<td>MA Thesis</td>
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<td>DRA1011H</td>
<td>Sources and Concepts in Drama, Theatre, and Performance Studies I</td>
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<tr>
<td>DRA1012H</td>
<td>Sources and Concepts in Drama, Theatre, and Performance Studies II</td>
</tr>
<tr>
<td>DRA1013H</td>
<td>Modelling New Scholarship in Drama, Theatre, and Performance Studies</td>
</tr>
<tr>
<td>DRA1014H</td>
<td>Teaching and Learning in Drama, Theatre, and Performance Studies</td>
</tr>
<tr>
<td>DRA1015H</td>
<td>Performing History</td>
</tr>
<tr>
<td>DRA3901H</td>
<td>Topics in Theatre, Drama, and Performance</td>
</tr>
<tr>
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<td>DRA3908H</td>
<td>Topics in Theatre, Drama, and Performance</td>
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<td>DRA4031H</td>
<td>Studies in Canadian Drama and Theatre</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>DRA4090Y</td>
<td>Directed Reading/Theatre Research</td>
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<td>DRA4091H</td>
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<tr>
<td>DRA4092H</td>
<td>Directed Reading</td>
</tr>
<tr>
<td>DRA4093H</td>
<td>Directed Reading</td>
</tr>
<tr>
<td>DRA5001H</td>
<td>The Disciplines of Drama, Theatre, and Performance Studies: Research Methods</td>
</tr>
<tr>
<td>DRA5002H</td>
<td>Research Development in Drama, Theatre, and Performance Studies (Credit/No Credit)</td>
</tr>
</tbody>
</table>

### Cross-Listed Courses

The Centre for Drama, Theatre and Performance Studies also cross-lists courses offered by other graduate units of the University of Toronto. A listing of approved courses, available during the academic year, appears on the Centre's website, which is updated in mid-summer. Students requesting courses from other units may be subjected to quotas and/or wait lists. Language and literature departments do not always provide courses in English translation. Confirm all course information — including date, time, location — with the appropriate unit as well as with the centre’s Graduate Administrator.
Earth Sciences

Earth Sciences: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Earth Sciences

MASc, MSc, and PhD

Collaborative Specializations

The following collaborative specialization is available to students in participating degree programs as listed below:

- Environmental Studies
  - Earth Sciences, MASc, MSc, PhD

Overview

The Department of Earth Sciences at the University of Toronto has a venerable 165-year tradition of research and education in the geosciences. Rankings place U of T at the very top in the geosciences in Canada and among the very best institutions globally. The Department of Earth Sciences is internationally regarded for research in fundamental geoscience, having given rise to major advances in ore deposits geology, geophysics, Precambrian geology, marine geology, Quaternary geology, and sedimentary basin analysis.

Current education in Earth Sciences at the University of Toronto continues the tradition of excellence. Students have access to a wide range of state-of-the-art laboratories and expert knowledge fostering cutting-edge research in almost all areas of Earth Sciences.

Contact and Address

Web: www.es.utoronto.ca
Email: grad@es.utoronto.ca
Telephone: (416) 978-1240
Fax: (416) 978-3938

Department of Earth Sciences
University of Toronto
Earth Sciences Centre
Room 1066, 22 Russell Street
Toronto, Ontario M5S 3B1
Canada

Earth Sciences: Graduate Faculty

Full Members

Anderson, Melissa - BSc, MSc, PhD
Bailey, Richard - BSc, PhD
Bergquist, Bridget - BS, PhD
Bollmann, Jorg - DrRerNat
Brenan, James - BSc, PhD
Chu, Xu - BSc, MPH, PhD
Cowling, Sharon - BSc, MSc, PhD
Davis, Donald - BSc, MSc, PhD
Desloges, Joseph - BSc, MSc, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria - BSc, MSc, PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Ferris, Grant - BSc, PhD
Finkelstein, Sarah - AB, MPH, PhD
Gorton, Michael - BSc, BSc, PhD
Gregory, Daniel - BSc, PhD
Halfar, Jochen - PhD
Head, Martin - BSc
Henderson, Grant - PhD
Howard, Ken - BSc, MSc, PhD
Laflamme, Marc - BS, PhD
Liu, Qinya - PhD
Lui, Samehah - BS, MS, PhD
Miall, Andrew - BSc, PhD
Pysklywec, Russell - BSc, MSc, PhD
Reisz, Robert - BSc, MSc, PhD, FRSC
Schoenbohm, Lindsay - PhD
Schulze, Daniel - PhD
Sherwood Lollar, Barbara - PhD
Simpson, Myrna - BS, DPhil
Spooner, Edward - BA, PhD
Tait, Kimberly - BSc, MSc, PhD
Warren, Lesley Alice - BSc, PhD
Wells, Matthew - BS, DPhil
Wortmann, Ulrich - BSc, MSc, PhD
Xu, Xiaoyong - BSc, MSc, PhD
Young, Paul - BSc, MSc, PhD, CEng

Members Emeriti

Milkereit, Bernd - DrRerNat
Robin, Pierre-Yves - MSc, PhD
Westgate, John - PhD

Associate Members

Bank, Carl-Georg - MSc, PhD
Halverson, Galen - BA, PhD
Jantunen, Liisa - PhD
Earth Sciences: Earth Sciences MASc

Master of Applied Science

Program Description

Students perform a two-year, focused research project in a broad range of topics in the earth sciences. Students may also undertake studies in interdisciplinary areas by arrangement with other departments such as Chemistry, Civil Engineering, Ecology and Evolutionary Biology, Materials Science and Engineering, Physics, and the School of the Environment.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School Graduate Studies. Applicants must also satisfy the Department of Earth Sciences’ additional admission requirements stated below.
- A four-year BSc or BASc degree, or its equivalent, from a recognized university.
- High academic standing, equivalent to a B or higher (equivalent to a 3.0 on a 4-point scale) at the University of Toronto, normally demonstrated by the average grade in the final two years.
- The department has no formal foreign language requirements. Students proceeding by thesis to any degree are expected to become familiar with the literature of their subjects, in whatever language it is written.

Program Requirements

- **Coursework.** Normally, complete 2.0 full-course equivalents (FCEs) as follows:
  - ESS1101H Graduate Seminars in Geology (0.5 FCE);
  - one of the six breadth courses (0.5 FCE): ESS2222H, ESS2302H, ESS2303H, ESS2304H, ESS2704H, or ESS2708H; and
  - 1.0 FCE of elective courses.
- A research thesis.

Program Length

- 6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

- 3 years full-time

Earth Sciences: Earth Sciences MSc

Master of Science

Program Description

Students conduct research in a broad range of topics in the earth sciences. Students may also undertake studies in interdisciplinary areas by arrangement with other departments such as Chemistry, Civil Engineering, Ecology and Evolutionary Biology, Materials Science and Engineering, Physics, and the School of the Environment.

There are two streams: a) the Doctoral-Stream (also known as Research-Based) Master’s, which involves a one-year research project that culminates in a research report (shorter than a formal thesis) and a presentation; and b) the All-Course Master’s Program.

The program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Earth Sciences’ additional admission requirements stated below.
- A four-year BSc or BASc degree, or its equivalent, from a recognized university.
- High academic standing, equivalent to a B or higher (equivalent to a 3.0 on a 4-point scale) at the University of Toronto, normally demonstrated by the average grade in the final two years.
- The department has no formal foreign language requirements. Students proceeding by thesis to any degree are expected to become familiar with the literature of their subjects, in whatever language it is written.

Program Requirements

**All-Course Option**

- Students are normally required to complete 5.0 full-course equivalents (FCEs) as follows:
  - ESS1101H Graduate Seminars in Geology (0.5 FCE);
  - ESS3608H All-Course Research Project (0.5 FCE);
  - one of the six breadth courses (0.5 FCE): ESS2222H, ESS2302H, ESS2303H, ESS2304H, ESS2704H, or ESS2708H;
  - 3.5 FCEs of elective courses.
- To encourage breadth, the department will permit students to substitute electives with equivalent non-earth science courses.

**Doctoral-Stream Option**

- Students are normally required to complete 3.5 FCEs as follows:
  - ESS1101H Graduate Seminars in Geology (0.5 FCE);
  - ESS3603Y+ Research Project (1.0 FCE);
  - ESS3601Y+ Research Presentation (1.0 FCE);
• one of the six breadth courses (0.5 FCE): ESS2222H, ESS2302H, ESS2303H, ESS2304H, ESS2704H, or ESS2708H; and
• 0.5 FCE of elective courses.
• To encourage breadth, the department will permit students to substitute electives with equivalent non-earth science courses.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Earth Sciences: Earth Sciences PhD

Doctor of Philosophy

Program Description

PhD students carry out a program of original research and perform a thesis defence. Students may also undertake studies in interdisciplinary areas by arrangement with other departments such as Chemistry, Civil Engineering, Ecology and Evolutionary Biology, Materials Science and Engineering, Physics, and the School of the Environment.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of a bachelor’s degree.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Earth Sciences’ additional admission requirements stated below.
• An appropriate, research-oriented MSc degree or its equivalent from a recognized university.
• High academic standing equivalent to a University of Toronto B+ or higher (equivalent to a 3.3 on a 4-point scale) in previous degrees.
• The department has no formal foreign language requirements. Students proceeding by thesis to any degree are expected to become familiar with the literature of their subjects, in whatever language it is written.

Program Requirements

• Preparation of a research thesis constituting a significant contribution to the research area.
• Coursework. Students are required to complete 1.0 full-course equivalent (FCE) as follows:
  o one of the six breadth courses (0.5 FCE): ESS2222H, ESS2302H, ESS2303H, ESS2304H, ESS2704H, or ESS2708H; and
  o an additional 0.5 elective FCE. The additional 0.5 FCE may be taken in departments other than Earth Sciences with the approval of the student’s advisory committee.
• A reduction in the number of required courses may be granted for students who have previously undertaken graduate studies in the appropriate areas. Recommendations must be made by a student’s advisory committee for consideration and approval by the department’s Graduate Affairs Committee.
• In all cases, the student’s supervisory committee reserves the right to assign additional courses if they feel that the student is deficient in a subject area essential to the research.

PhD Program (Transfer)

Transfer Requirements

• A four-year BSc or BASc degree, or its equivalent, from a recognized university. High academic standing during undergraduate study equivalent to an A– or higher (equivalent to a 3.7 on a 4-point scale) at the University of Toronto, normally demonstrated by the average grade in the final two years.
• Students are normally expected to complete the MSc degree before proceeding to the PhD, but exceptions may be made when the student has the appropriate research experience. Normal departmental rules for the completion of the PhD apply (see the departmental website). Students who transfer from the MSc to the PhD will not receive the MSc degree.

Program Requirements

• Preparation of a research thesis constituting a significant contribution to the research area.
• Coursework. Students are required to complete a total of 1.5 full-course equivalents (FCEs) as follows:
  o ESS1101H Graduate Seminars in Geology (0.5 FCE);
one of the six breadth courses (0.5 FCE): ESS2222H, ESS2302H, ESS2303H, ESS2304H, ESS2704H, or ESS2708H; and

- an additional 0.5 elective FCE. The additional 0.5 FCE may be taken in departments other than Earth Sciences with the approval of the student's advisory committee.

- A reduction in the number of required courses may be granted for students who have previously undertaken graduate studies in the appropriate areas. Recommendations must be made by a student's advisory committee for consideration and approval by the department's Graduate Affairs Committee.

**Program Length**

5 years

**Time Limit**

7 years

**Earth Sciences: Earth Sciences MASc, MSc, PhD Courses**

Check with the department for the current year's offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ESS1101H</td>
<td>Seminars in Earth Sciences</td>
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<tr>
<td>ESS1423H</td>
<td>Mineralogy</td>
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<td>ESS1430H</td>
<td>Basin Analysis</td>
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<td>ESS1436H</td>
<td>Paleoecological Assessment of Environmental Change</td>
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<td>ESS1441H</td>
<td>Advanced Structure</td>
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<td>ESS1445H</td>
<td>Global Tectonics</td>
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<td>ESS1461H</td>
<td>Paleoenvironmental Studies</td>
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<td>ESS1463H</td>
<td>Contaminants in the Environment</td>
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<td>ESS2222H</td>
<td>Tectonics and Planetary Dynamics</td>
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<td>ESS2302H</td>
<td>Mineral Resources</td>
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<td>ESS2303H</td>
<td>Earth Systems Evolution</td>
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<td>ESS2304H</td>
<td>Geochemistry</td>
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<td>ESS2608H</td>
<td>Advanced Glacial Sedimentology</td>
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<td>ESS2704H</td>
<td>Isotope Geochemistry</td>
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<td>ESS2708H</td>
<td>Characterization of Geological Materials</td>
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<td>ESS3601Y*</td>
<td>Research Presentation</td>
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<td>ESS3603Y*</td>
<td>Research Project</td>
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<td>ESS3604H</td>
<td>Selected Topics in Geology</td>
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<td>ESS3605H</td>
<td>Selected Topics in Geochemistry</td>
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<td>ESS3606H</td>
<td>Selected Topics Earth System Evolution</td>
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<td>ESS3607H</td>
<td>Selected Topics in Geodynamics</td>
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<td>ESS3608H</td>
<td>All-Course Research Project</td>
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<tr>
<td>JPE1452H</td>
<td>Geophysical Imaging: Non-seismic Methods</td>
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<tr>
<td>JPE1493H</td>
<td>Seismology</td>
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</table>
JPE2605H Advanced Seismology

Additional courses related to geophysics can be found in the Graduate Department of Physics course listings.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
East Asian Studies

East Asian Studies: Introduction

Faculty Affiliation
Arts and Science

Degree Programs

East Asian Studies

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Contemporary East and Southeast Asian Studies
  - East Asian Studies, MA
- Food Studies
  - East Asian Studies, MA, PhD
- Sexual Diversity Studies
  - East Asian Studies, MA, PhD
- South Asian Studies
  - East Asian Studies, MA, PhD
- Women and Gender Studies
  - East Asian Studies, MA, PhD

Overview

The Department of East Asian Studies has a long, rich history at the University of Toronto as a centre for research and teaching on the humanities of East Asia, past and present. Faculty members specialize in social and cultural history, literature, philosophy, religion, language, art, film and visual culture. They are committed to the innovative pursuit of knowledge across regional, temporal and disciplinary divides. Many hold joint appointments with various departments, centres and collaborative specializations throughout the university.

Students and faculty in the department have access to a wide array of resources to support their research and learning. The Cheng Yu Tung East Asian Library holds more than 500,000 volumes in East Asian languages, making it a leading research collection in North America. The Royal Ontario Museum houses six separate galleries on the arts and artifacts of East Asia. The department and the Asian Institute host a variety of lecture series and workshops. The university campus is located in downtown Toronto, home to multiple thriving Asian communities.

Contact and Address

Web: eas.utoronto.ca
Email: eas.grad@utoronto.ca

East Asian Studies: Graduate Faculty

Full Members

Cazdyn, Eric - BA, MA, PhD
Feng, Linda Rui - BA, MA, PhD
Kawashima, Ken - BA, MA, PhD
Keirstead, Thomas - BA, MA, PhD
Lam, Tong - BSc, MA, PhD
Liu, Johanna - BA, MA, PhD
Meng, Yue - BA, MA, PhD
Poole, Janet - BA, MA, PhD
Sakaki, Atsuko - BA, MA, PhD
Sanders, Graham - BA, PhD
Schmid, André - BA, MA, PhD
Wu, Yiching - BA, MA, MA, PhD
Yoneyama, Lisa - BA, MA, PhD
Zhong, Yurou - BA, MA, PhD

Members Emeriti

Arntzen, Sonja - BA, MA, PhD
Donnelly, Michael - BSc, MA, PhD
Falkenheim, Victor - AB, MA, PhD
Liman, Anthony - MA
Lynn, Richard - BA, MA, PhD
Nakajima, Kazuko - BA, MA, MPH
Schlepp, Wayne - BSc, BA, PhD
Tsukimura, Reiko - BA, MA, PhD
Waterhouse, David - BA, LRAM, MA, MA

Associate Members

Arimori, Jotaro - BA, AB, MA
Chen, Li - BA, MA, AM, JD, PhD
Chin, Carol - BA, MA, PhD
Cho, Michelle - BA, MA, DPhil
Crawford, Gary - BSc, MA, PhD
Fujitani, Takashi - BA, MA, PhD
Gu, Yi - BLitt, MMSt, PhD
Hsiung, Ping-Chun - PhD
Ko, Kyoungrak - BA, MA, MSc
Komuro-Lee, Ikuko - BA, MA
Luong, Hy Van - BA, PhD
Peng, Ito - BSW, BSc, MA, PhD
Purtle, Jennifer - BA, MPH, MA, PhD
Rupprecht, Hsiao-Wei - BA, MA, MLS, PhD
Shen, Chen - BA, PhD
Tran, Nhung - MA, PhD
Wong, Joseph - BA, MA, PhD, CRC
East Asian Studies: East Asian Studies MA

Master of Arts

Program Description

East Asian Studies offers three tracks through its MA program: 1) MA through coursework, 2) MA with Major Research Paper (MRP), and 3) MA with thesis. It is possible to switch between the three tracks as long as all requirements are fulfilled.

Applicants should consult the department’s website for details on the MA program, applications, course offerings, and profiles of the graduate faculty.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of East Asian Studies’ additional admission requirements stated below.
- Successful completion of an appropriate bachelor’s degree from a recognized university with a major in East Asian studies and at least a B+ standing in the final year.
- Applicants without a major in East Asian studies may also be considered, provided they demonstrate sufficient scholarly interest and academic preparation in East Asian studies.
- Statement of approximately 500 words (two pages) setting out the student’s main fields of interest and proposed course of study.
- Two letters of recommendation from scholars who have knowledge of previous academic work.
- Programs are based on the study of original texts. This presupposes knowledge of the relevant languages.
- A 10- to 15-page sample of the applicant’s academic writing in English.
- Applicants educated outside Canada whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must provide results of an English-language proficiency examination as part of their application. Tests must have been taken within the last 24 months at the time of submission of their application. Applicants taking the Internet-based Test of English as a Foreign Language (TOEFL) must achieve a minimum score of 100/120 and 22/30 on the writing and speaking sections. Comparable scores on similar tests are also acceptable.

Program Requirements

- The program may be completed through one of three routes:
  - Coursework: students normally complete 4.0 full-course equivalents (FCEs) with at least 2.0 FCEs in EAS courses, including the required course EAS2020H Critical Approaches to East Asia (0.5 FCE).
  - Coursework plus Major Research Paper (MRP): the MRP must be written with the guidance of a supervisor after the completion of coursework. Normally 4.0 FCEs as follows:
    - EAS1150Y Major Research Paper (1.0 FCE).
  - Coursework plus thesis: the thesis must be written with the guidance of a supervisor after the completion of coursework. Normally 4.0 FCEs as follows:
    - 3.0 FCEs of coursework including at least 1.5 FCEs in EAS courses, including the required course EAS2020H Critical Approaches to East Asia (0.5 FCE)
    - EAS1250Y MA Thesis (1.0 FCE).
- Courses are selected in consultation with the Coordinator of Graduate Studies.
- Students are encouraged to continue with necessary language study, but language courses are not included in the FCEs.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

East Asian Studies: East Asian Studies PhD

Doctor of Philosophy

Program Description

The PhD program is a research degree that prepares students to teach and research in the area of East Asian Studies. The program consists of coursework, language study, comprehensive exams, a dissertation prospectus, writing of a dissertation, and a final oral examination on the dissertation.

Applicants should consult the department’s website for details on the PhD program, applications, course offerings, and profiles of the graduate faculty.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate MA degree or 2) direct entry after completing a BA degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of East Asian Studies’ additional admission requirements stated below.
• Normally, completion of the MA program in the Department of East Asian Studies, or its equivalent from a recognized university, with an average grade of at least A–.
• Statement of approximately 500 words (two pages) setting out the student's main fields of interest and proposed course of study.
• Three letters of recommendation from scholars who have knowledge of previous academic work.
• Programs are based on the study of original texts. This presupposes knowledge of the relevant languages.
• A 10- to 15-page sample of the applicant's academic writing in English.
• Applicants educated outside Canada whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must provide results of an English-language proficiency examination as part of their application. Tests must have been taken within the last 24 months at the time of submission of their application. Applicants taking the Internet-based Test of English as a Foreign Language (TOEFL) must achieve a minimum score of 100/120 and 22/30 on the writing and speaking sections. Comparable scores on similar tests are also acceptable.

Program Requirements

• **Coursework.** Students must successfully complete a total of 4.0 non-language full-course equivalents (FCEs), including at least 2.0 FCEs in EAS courses, to be selected in consultation with the Coordinator of Graduate Studies. 2.0 FCEs must be completed in Year 1, with an average grade of at least A–. The remaining courses are normally completed by the end of Year 2, maintaining an average of at least A–.
  o EAS2020H Critical Approaches to East Asia is a required course if not taken previously. If EAS2020H has previously been taken, students are required to take an additional 0.5 FCE.
  o Students are permitted to take some of their courses in other departments.
• **A comprehensive qualifying examination,** undertaken with the guidance of a supervisory committee, must be taken by November 30 of Year 3. The committee will provide the student with three questions (in a Major, Minor, and Adjacent field), for which the student must provide written answers within seven days. Within one week after submitting the answers, the student will meet with the committee to provide an oral defence of the answers. The committee will decide whether the student has passed or failed in each of the three fields on the basis of the written answers and oral defence taken together. If the student fails the Major field, he or she will be given one more chance to pass an entirely new examination, within three months of the first attempt. If the student passes the Major field but fails either one or both of the Minor and Adjacent fields, then he or she will be given one more chance to take an examination consisting of new questions in the fields failed, within six weeks of the first attempt. Third attempts are not permitted.
• An appropriate level of proficiency in at least one language (other than English) relevant to the student's areas of study must be demonstrated by November 30 of Year 3; the language(s), level of proficiency, and method of evaluation are to be determined by the Coordinator of Graduate Studies, in consultation with the student's supervisor. Students will take a language placement test (or multiple tests, depending on the area of study) at the beginning of their program. Upon receiving the placement result, students must meet with their supervisor. If the appropriate level of proficiency has not been demonstrated, the student and their supervisor will devise a plan for achieving proficiency by November 30 of Year 3. The plan will be approved by the Coordinator of Graduate Studies.
• Within one to three months after completing the comprehensive examination, students are required to produce a **dissertation prospectus** to be approved by their supervisory committee. The committee will meet to consider the dissertation prospectus and provide the student with feedback. The student will make the revisions and submit the prospectus to his/her supervisor for final approval, which must be given by the end of the student's third year. After the dissertation prospectus is approved, the student advances to candidacy.
• After completing all of the above requirements, students are required to produce a **doctoral dissertation** with the guidance of their supervisory committee. The completed dissertation must be defended at a Doctoral Final Oral Examination.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of East Asian Studies’ additional admission requirements stated below.
• Admission to the PhD program normally requires completion of the MA program in the Department of East Asian Studies, or its equivalent from a recognized university, with an average grade of at least A–. However, departmental assessment may also permit registration directly from a BA degree in the most exceptional cases where, for instance, there is a very high grade point average or a well-documented demonstration of capacity for original research.
• Statement of approximately 500 words (two pages) setting out the student's main fields of interest and proposed course of study.
• Three letters of recommendation from scholars who have knowledge of previous academic work.
• Programs are based on the study of original texts. This presupposes knowledge of the relevant languages.
• A 10- to 15-page sample of the applicant’s academic writing in English.
• Applicants educated outside Canada whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must provide results of an English-language proficiency examination as part of their
Program Requirements

- **Coursework.** Students must successfully complete a total of **4.0 non-language full-course equivalents (FCEs)**, including at least 2.0 FCEs in EAS courses, to be selected in consultation with the Coordinator of Graduate Studies. 2.0 FCEs must be completed in Year 1, with an average grade of at least A–. The remaining courses are normally completed by the end of Year 2, maintaining an average of at least A–.
  - EAS2020H *Critical Approaches to East Asia* (0.5 FCE) is a required course if not taken previously. If EAS2020H has previously been taken, students are required to take an additional 0.5 FCE.
  - Students are permitted to take some of their courses in other departments.

- **EAS1150Y *Reading and Major Research Paper*** (1.0 FCE), to be written with the guidance of and assessed by the student’s academic supervisor, must be completed by August 31 of Year 2.

- **A comprehensive qualifying examination,** undertaken with the guidance of a supervisory committee, must be taken by February 28 of Year 3. The committee will provide the student with three questions (in a Major, Minor, and Adjacent field), for which the student must provide written answers within seven days. Within one week after submitting the answers, the student will meet with the committee to provide an oral defence of the answers. The committee will decide whether the student has passed or failed in each of the three fields on the basis of the written answers and oral defence taken together. If the student fails the Major field, he or she will be given one more chance to pass an entirely new examination, within three months of the first attempt. If the student passes the Major field but fails either one or both of the Minor and Adjacent fields, then he or she will be given one more chance to take an examination consisting of new questions in the fields failed, within six weeks of the first attempt. Third attempts are not permitted.

- An appropriate level of proficiency in at least one **language** (other than English) relevant to the student’s areas of study must be demonstrated by November 30 of Year 3; the language(s), level of proficiency, and method of evaluation are to be determined by the Coordinator of Graduate Studies, in consultation with the student’s supervisor. Students will take a language placement test (or multiple tests, depending on the area of study) at the beginning of their program. Upon receiving the placement result, students must meet with their supervisor. If the appropriate level of proficiency has not been demonstrated, the student and their supervisor will devise a plan for achieving proficiency by November 30 of Year 3. The plan will be approved by the Coordinator of Graduate Studies.

- Within one to three months after completing the comprehensive examination, students are required to produce a **dissertation prospectus** to be approved by their supervisory committee. The committee will meet to consider the dissertation prospectus and provide the student with feedback. The student will make the revisions and submit the prospectus to his/her supervisor for final approval, which must be given by the end of the student’s third year. After the dissertation prospectus is approved, the student advances to candidacy.

- After completing all of the above requirements, students are required to produce a **doctoral dissertation** with the guidance of their supervisory committee. The completed dissertation must be defended at a Doctoral Final Oral Examination.

**Program Length**

5 years

**Time Limit**

7 years

**East Asian Studies: East Asian Studies MA, PhD Courses**

The following courses may be offered by the department. Not all courses are offered every year. Please consult the department’s website for a current course listing.

**Cultural Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAS1101Y</td>
<td>Classical Chinese I</td>
</tr>
<tr>
<td>EAS1102H</td>
<td>Classical Chinese II (prerequisite: EAS110Y1; exclusion: EAS458H1)</td>
</tr>
<tr>
<td>EAS1103Y</td>
<td>Introduction to Classical Japanese</td>
</tr>
<tr>
<td>EAS1177H</td>
<td>Chinese Cultural and Historical Studies</td>
</tr>
<tr>
<td>EAS1180H</td>
<td>Environmental Criticism</td>
</tr>
<tr>
<td>EAS1335H</td>
<td>Violence, Justice, the Human</td>
</tr>
<tr>
<td>EAS1336H</td>
<td>Memory and Trauma in Critical East Asian Historical Perspective</td>
</tr>
<tr>
<td>EAS1337H</td>
<td>Diaspora and Transpacific Studies</td>
</tr>
<tr>
<td>EAS1339H</td>
<td>Topics in Chinese Art Theories</td>
</tr>
<tr>
<td>EAS1419H</td>
<td>Chinese Cultural Studies Seminar: May Fourth</td>
</tr>
<tr>
<td>EAS1432H</td>
<td>Korean Cultural Studies Seminar</td>
</tr>
<tr>
<td>EAS1435H</td>
<td>Crisis, Repetition, and History</td>
</tr>
<tr>
<td>EAS1436H</td>
<td>Rethinking Realism in 20th Century Korea</td>
</tr>
<tr>
<td>EAS1439H</td>
<td>Crisis, Population, Archive</td>
</tr>
<tr>
<td>EAS1441H</td>
<td>Advanced Topics in Japanese Cinema</td>
</tr>
<tr>
<td>EAS1445H</td>
<td>On the Organic: Land and Labour Power</td>
</tr>
<tr>
<td>EAS1447H</td>
<td>Sound Studies and Modern Japan</td>
</tr>
<tr>
<td>EAS1449H</td>
<td>Future, Architecture, Japan</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>EAS1474H</td>
<td>US and Canada's Wars in East Asia</td>
</tr>
<tr>
<td>EAS1475H</td>
<td>Contemporary Cultural Theories</td>
</tr>
<tr>
<td>EAS1477H</td>
<td>Samurai Culture (exclusion: EAS477H1)</td>
</tr>
<tr>
<td>EAS2020H</td>
<td>Critical Approaches to East Asia</td>
</tr>
<tr>
<td>EAS2323H</td>
<td>Rethinking Chinese Cultural History</td>
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</table>

**History**

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EAS1130H</td>
<td>Rethinking China's Cultural Revolution: History, Politics, and Theory</td>
</tr>
<tr>
<td>EAS1140Y</td>
<td>From Republic to People's Republic: The Chinese Revolution from 1895 to the Present</td>
</tr>
<tr>
<td>EAS1176H</td>
<td>Comparative Historical Socialisms in East Asia and Beyond</td>
</tr>
<tr>
<td>EAS1409H</td>
<td>Cities in Premodern China</td>
</tr>
<tr>
<td>EAS1411H</td>
<td>Art and Archaeology of Early China</td>
</tr>
<tr>
<td>EAS1412H</td>
<td>Special Topics in Archaeology of Ancient China</td>
</tr>
<tr>
<td>EAS1173H,Y</td>
<td>Modern Korean History Seminar</td>
</tr>
<tr>
<td>EAS1174Y</td>
<td>Rethinking Empire in East Asia</td>
</tr>
<tr>
<td>EAS1425H</td>
<td>Critique of Everyday Life and Capitalism</td>
</tr>
<tr>
<td>EAS1426H</td>
<td>Transition, Subjectivity, Revolution</td>
</tr>
<tr>
<td>EAS1446H</td>
<td>The Communist Hypothesis and Asia (exclusion: EAS446H1)</td>
</tr>
<tr>
<td>EAS1466H</td>
<td>History, Everyday Life, and North Korea</td>
</tr>
<tr>
<td>EAS1471H</td>
<td>Issues in Political Economy of South Korea</td>
</tr>
<tr>
<td>EAS1472H</td>
<td>Cold War in the Pacific</td>
</tr>
<tr>
<td>EAS1496H</td>
<td>History of the Chinese Book</td>
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**Literature**

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<tr>
<td>EAS1137H,Y</td>
<td>Chinese Poetics</td>
</tr>
<tr>
<td>EAS1151H</td>
<td>Chinese Poetry I</td>
</tr>
<tr>
<td>EAS1152H</td>
<td>Chinese Poetry II</td>
</tr>
<tr>
<td>EAS1182H</td>
<td>Writing as Technology in Modern China</td>
</tr>
<tr>
<td>EAS1345H</td>
<td>Readings in Japanese Literary Criticism</td>
</tr>
<tr>
<td>EAS1408H</td>
<td>Identity and Diaspora in Modern Taiwanese Literature</td>
</tr>
<tr>
<td>EAS1417H</td>
<td>Korean Literary Translation</td>
</tr>
<tr>
<td>EAS1437H</td>
<td>Mid-century Modernism in the Koreas: Literature, War, and Decolonization</td>
</tr>
<tr>
<td>EAS1444H</td>
<td>The City, Body, and Text in Modern Japanese Literature</td>
</tr>
<tr>
<td>EAS1467H</td>
<td>Photographic Narratives of Japan</td>
</tr>
<tr>
<td>EAS1486H</td>
<td>Mahayana Sutra Literature</td>
</tr>
<tr>
<td>EAS1538H</td>
<td>Writing Women in Premodern China</td>
</tr>
<tr>
<td>COL5101H</td>
<td>Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates</td>
</tr>
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</table>
### Philosophy and Religion

<table>
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<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>POL2416Y</td>
<td>Politics and Society in Contemporary China</td>
</tr>
</tbody>
</table>

### Research Seminars

<table>
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<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAS1100H,Y</td>
<td>Special Topics in Chinese Studies</td>
</tr>
<tr>
<td>EAS1116H,Y</td>
<td>Special Topics in Chinese Culture</td>
</tr>
<tr>
<td>EAS1143H</td>
<td>Topics in Medieval China</td>
</tr>
<tr>
<td>EAS1150H,Y</td>
<td>Reading and Major Research Paper</td>
</tr>
<tr>
<td>EAS1163H</td>
<td>Special Topics in Korean Studies</td>
</tr>
<tr>
<td>EAS1250Y</td>
<td>MA Thesis (Credit/No Credit)</td>
</tr>
<tr>
<td>EAS1300H</td>
<td>Special Topics in Japanese Studies</td>
</tr>
<tr>
<td>EAS1313Y</td>
<td>Japanese Source Materials and Reference Works</td>
</tr>
<tr>
<td>EAS1323Y</td>
<td>Readings in Japanese Documentary Source Materials</td>
</tr>
<tr>
<td>EAS1497H</td>
<td>Special Topics in East Asian Studies</td>
</tr>
<tr>
<td>EAS1999Y</td>
<td>East Asian Studies Bibliography, Reference, and Research Methodology</td>
</tr>
</tbody>
</table>
Ecology and Evolutionary Biology

Ecology and Evolutionary Biology: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Ecology and Evolutionary Biology

MSc and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environmental Studies
  - Ecology and Evolutionary Biology, PhD
- Genome Biology and Bioinformatics
  - Ecology and Evolutionary Biology, PhD

Overview

The disciplines of ecology and evolutionary biology involve complementary perspectives on biological systems. Individual and collaborative research within the department covers the range of both disciplines and often involves study and synthesis across multiple levels of organization. Professors' research interests include population/community ecology, ecosystem/landscape/evolutionary ecology, conservation biology, genetics, evolutionary genetics, genomics, molecular evolution, bioinformatics, behaviour, behaviour genetics, theoretical biology, plant biology, animal biology, taxonomy/systematics, developmental biology, anatomy, and physiology.

Strong links exist between the Department of Ecology and Evolutionary Biology (EEB) and the Royal Ontario Museum, the Centre for Global Change, and the School of the Environment. The University owns a nearby field station dedicated to ecological and evolutionary research (the Koffler Scientific Reserve). The department also has partnerships with government agencies including the Ontario Ministry of Natural Resources and Forestry that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park, funding, and long-term data sets.

Graduate students are engaged in all aspects of the departmental community including reading and discussion groups, seminars, and social events. Other activities include workshops on writing papers, giving presentations, R and Python, and finding positions — both academic and those outside of universities.

The EEB department has 60 faculty members specializing in ecology and evolution. Professors supervising graduate students are located on all three campuses of the University (St. George, Mississauga, Scarborough) as well as at the Royal Ontario Museum.

Contact and Address

Web: www.eeb.utoronto.ca
Email: gradadmin.eeb@utoronto.ca
Telephone: (416) 978-7172
Fax: (416) 978-5878

Department of Ecology and Evolutionary Biology
University of Toronto
Earth Sciences Centre
Room 3046, 25 Willcocks Street
Toronto, Ontario M5S 3B2
Canada

Ecology and Evolutionary Biology: Graduate Faculty

Full Members

Agrawal, Aneil - BSc, PhD, CRC
Andrade, Maydianne - BSc, MS, PhD
Barrett, Spencer - BSc, PhD
Boonstra, Rudy - BSc, PhD
Cadotte, Marc - BS, MS, PhD
Campbell, Malcolm - DPhil
Caron, Jean-Bernard - MSc, PhD
Chang, Belinda - AB, PhD, CRC
Collins, Nicholas C. - BA, PhD
Currie, Douglas - BSc, PhD
Cutter, Asher - PhD, CRC
Cyr, Helene - BSc, MSc, PhD
Darling, D. Christopher - MSc, PhD
Dillon, Marcus - BA, PhD
Eckenwalder, James - BA, PhD
Engstrom, Mark - BSc, MSc, PhD
Evans, David - BSc, PhD
Fitzpatrick, Mark - BS, MS, PhD
Fortin, Marie-Josée - MSc, PhD
Frederickson, Megan - AB, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gilbert, Benjamin - BSc, MSc, PhD
Gross, Mart - BSc, PhD
Guttman, David - BS, PhD
Gwynne, Darryl - BSc, PhD
Holmes, Melissa - BA, MA, PhD
Jackson, Donald - BSc, MSc, PhD
Johnson, Marc - BSc, PhD
Kohn, Linda - BS, PhD
Kotanen, Peter - BSc, MSc, PhD
Krkosek, Marty - BSc, PhD
Kronzucker, Herbert - PhD
Ecology and Evolutionary Biology: Ecology and Evolutionary Biology MSc

Master of Science

Program Description

The main goal of the MSc program is to provide students with the opportunity to design, conduct, and write up a substantial independent research project. Students’ projects cover the full range of topics listed in the Overview (above) and may include field work, lab work, bioinformatics, computer simulations, and/or theory. MSc students must demonstrate competence in independent research and will do research with the goal of authoring or co-authoring a scientific publication. Graduates go on to a wide range of careers including jobs in government agencies, teaching, and higher education.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Ecology and Evolutionary Biology’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university, with an average grade equivalent to a University of Toronto B+ or better in the last year of the bachelor’s degree and a minimum B average in the previous year.
- Applicants will not be admitted until they have secured an agreement with a graduate faculty member to sponsor and supervise the student’s research.

Program Requirements

- **Coursework.** Students must successfully complete 0.5 graduate full-course equivalent (FCE) chosen from courses offered by the EEB department or, with the permission of the supervisor(s) and supervisory committee, offered by other U of T departments. Students should consult supervisory faculty about the most appropriate courses.
- Students must complete a **thesis** under the direction of the student’s supervisor, assisted by an advisory committee, and defended at an oral examination.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time
Ecology and Evolutionary Biology: Ecology and Evolutionary Biology PhD
Doctor of Philosophy

Program Description

The main goal of the PhD program is to provide students with the opportunity to design, conduct, and write about a series of substantial, inter-related, independent research projects. Students' projects cover the full range of topics listed in the Overview (above) and may include field work, lab work, bioinformatics, theory, computer simulations, or some combination of these approaches.

- PhD students are expected to complete an original independent research program that makes substantial and innovative contributions to their field of research. It is expected that PhD candidates will publish a number of primary scientific papers based on their research.
- A thesis is completed under the direction of the student's supervisor(s), assisted by a supervisory (advisory) committee, and defended at an oral examination.
- The average time to completion is 5.5 years.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of a BSc degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Ecology and Evolutionary Biology's additional admission requirements stated below.
- Students will be admitted only when they have made arrangements to secure a research supervisor by contacting professors in the department.
- Applicants may be accepted who already hold an MSc degree from a recognized university with a grade average equivalent to at least a University of Toronto A– during the MSc and an average of at least B+ in the last year of the bachelor's program.

Program Requirements

- **Coursework.** Students must successfully complete a total of 1.5 graduate full-course equivalents (FCEs) (three half courses). These courses are chosen from those offered by the EEB department, or with the permission of the supervisor(s) and supervisory committee, offered by other U of T departments.
- During an appraisal exam, students are examined on both their mastery of concepts in ecology and evolutionary biology and a submitted research proposal. Students are examined 14 to 20 months into the program.
- Students must deliver two public seminars in the department based on their thesis research.
- Students must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.

Program Length

4 years

Time Limit

6 years

PhD Program (Transfer)

Transfer Requirements

- Applicants may be accepted first into the MSc program from a bachelor's program and, conditional upon evidence of research excellence as judged by the thesis supervisory committee, may transfer into the PhD program.
- Students must make arrangements to secure a research supervisor by contacting professors in the department.

Program Requirements

- **Coursework.** Students must successfully complete a total of 2.0 graduate full-course equivalents (FCEs) (four half courses). These courses are chosen from those offered by the EEB department or, with the permission of the supervisor(s) and supervisory committee, offered by other U of T departments.
- Students transferring into the PhD program from the MSc may apply 0.5 graduate FCE towards the PhD course requirement.
- During an appraisal exam, students are examined on both their mastery of concepts in ecology and evolutionary biology and a submitted research proposal. Students are examined 14 to 26 months into the program.
- Students must deliver two public seminars in the department based on their thesis research.
- Students must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.

Program Length

5 years

Time Limit

7 years
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Ecology and Evolutionary Biology’s additional admission requirements stated below.
- Students will be admitted only when they have made arrangements to secure a research supervisor by contacting professors in the department.
- Exceptional applicants may be accepted for direct entry into the PhD with a BSc degree, an average grade equivalent to a University of Toronto A– or better in courses in ecology and evolutionary biology, and evidence of research potential.

Program Requirements

- **Coursework.** Exceptional students admitted to the PhD program without an MSc degree must successfully complete a total of **2.0 graduate full-course equivalents (FCEs) (four half courses)**. These courses are chosen from those offered by the EEB department, or with the permission of the supervisor(s) and supervisory committee, offered by other U of T departments.
- During an **appraisal exam**, students are examined on both their mastery of concepts in ecology and evolutionary biology and a submitted research proposal. Students are examined 14 to 26 months into the program.
- Students must deliver **two public seminars** in the department based on their thesis research.
- Students must submit a **thesis** and defend it at a **Doctoral Final Oral Examination** conducted by the School of Graduate Studies.

Program Length

- **5 years**

Time Limit

- **7 years**

Ecology and Evolutionary Biology: Ecology and Evolutionary Biology MSc, PhD Courses

Not all courses are offered every year. Please visit the Ecology and Evolutionary Biology website for a current list of course offerings including special topics courses.

Courses Offered at the Graduate Level Only

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEB1210H</td>
<td>Advanced Statistics</td>
</tr>
</tbody>
</table>

Graduate Courses With Significant Undergraduate Content

These courses will normally constitute only a minor component of the required credits.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEB1328H</td>
<td>Physiological Ecology</td>
</tr>
<tr>
<td>EEB1340H</td>
<td>Comparative Plant Morphology</td>
</tr>
<tr>
<td>EEB1443H</td>
<td>Phylogenetic Principles</td>
</tr>
<tr>
<td>EEB1459H</td>
<td>Population Genetics</td>
</tr>
<tr>
<td>EEB1460H</td>
<td>Molecular Evolution</td>
</tr>
<tr>
<td>EEB1462H</td>
<td>Phylogenetic Systematics</td>
</tr>
</tbody>
</table>
Economics

Economics: Introduction

Faculty Affiliation
Arts and Science

Degree Programs
Economics
MA and PhD

Combined Degree Programs
• STG, Law, Juris Doctor / Economics, MA
• STG, Law, Juris Doctor / Economics, PhD

Overview

The Department of Economics at the University of Toronto is large and highly ranked. The teaching and research interests of its graduate faculty members span a wide range of subjects and cover theory, applied data analysis and econometric methodology.

The department offers both MA and PhD programs in economics. The goal of the graduate programs is to further the student’s capacity for economic analysis through rigorous instruction in theory, econometrics and a wide variety of fields. The MA and PhD course and research offerings provide great diversity, breadth and scope; students can readily specialize in almost any area of interest. Additionally, students may take suitable elective courses in statistics, mathematics, computer science and other allied fields. Students benefit from Economics’ close association with faculty members from related programs, such as those at the Rotman School of Management. They also benefit from the University of Toronto’s excellent facilities, including the best university library in Canada.

The department’s programs attract students from across Canada and all parts of the globe. Approximately 65 new MA students and 15 to 20 new PhD students are enrolled each year with total combined enrolment of approximately 150.

MA graduates find employment in their area of interest in the public, private and not-for-profit sectors. They also successfully pursue PhD programs in economics. PhD graduates obtain academic placement and employment in the public and private sectors.

The Department of Economics and the Rotman School of Management also offer a professional Master of Financial Economics (MFE) program.

Contact and Address

MA and PhD:
Web: www.economics.utoronto.ca
Email: www.economics.utoronto.ca/index.php/index/index/contact
Telephone: (416) 978-4544

MA and PhD Graduate Office
Department of Economics, Max Gluskin House
University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
Canada

Economics: Graduate Faculty

Full Members

Aguirregabiria, Victor - BA, MSc, PhD
Aivazian, Varouj - BS, MA, PhD
Alexopoulos, Michelle - BSc, MA, PhD
Baker, Michael - BComm, MA, PhD
Bar-Isaac, Heski - BA, MSc, PhD
Benjamin, Dwayne - BSc, MA, PhD
Blouin, Arthur - BA, MA, PhD
Bobonis, Gustavo - BA, PhD
Brandt, Loren - BS, MS, PhD
Burd, Martin - BSc, MA, PhD
Carroll, Gabriel - BA, PhD
Chandra, Ambarish - BMath, MSc, PhD
Cziraki, Peter - MA, MPH, MSc, PhD
Damiano, Ettore Vincenzo - AB, MA, MPH, PhD (Chair and Graduate Chair)
Deb, Rahul - MA, MPH, PhD
Duarte, Margarida - MSc, PhD
Dyrd, Sebastian - MA, MA, PhD
Eli, Shari - BA, PhD
Gans, Joshua - BSc, PhD
Goldfarb, Avi - BA, MA, PhD
Gourieroux, Christian - PhD
Gu, Jiaying - BA, MSc, PhD
Halev, Yoram - BA, MA, PhD
Hall, Jonathan - BA, PhD
Hamilton, Gillian - MSc, PhD
Heblitch, Stephan - PhD
Hossain, Tanjim - BA, BS, PhD
Kambourov, Gueorgui - BA, MA, DPhil
Kramer, Lisa - BBA, PhD
Kroft, Kory - BA, MA, PhD
Kuruscu, Burhan - BSc, MA, PhD
Laporte, Audrey - BA, MA, PhD
Lim, Kevin Shun Wei - MA, MA, PhD
Luo, Yao - BS, MA, PhD
McMillan, Robert - AB, DPhil
Melino, Angelo - BA, PhD
Mitchell, Matthew - BS, MA, PhD
Mondria, Jordi - BA, MA, PhD
Morrow, Peter - BA, MA, PhD
Mourifie, Isamel - BMath, MSc, PhD
Oreopoulos, Philip - BA, MA, PhD
Osborne, Martin - BA, PhD
Ozkan, Serdar - MSc, PhD
Peski, Marcin - BA, MA, MA, PhD
Pitchik, Carolyn - BA, MSc, PhD
Restuccia, Diego - BA, MA, PhD
Shi, Xianwen - PhD
Siow, Aloysius - BA, PhD
Smart, Michael - BA, BA, PhD
Souza Rodrigues, Eduardo Augusto - PhD
Stabile, Mark - BA, MA, PhD, PhD
Steinberg, Joseph - BA, PhD
Stewart, Colin - BSc, MPH, MA, MSc, PhD (Associate Chair, Graduate Studies)
Strange, William - BA, MA, PhD
Trebilcock, Michael - LLB, LLM
Trefler, Daniel - BA, MPH, PhD
Watson, Yuanyuan - BA, MA, PhD
Wolthoff, Ronald - PhD
Yatchew, Adonis - BA, MA, PhD
Zhu, Xiaodong - PhD

Members Emeriti
Anderson, Gordon - BA, MSc, PhD
Berry, R. Albert - BA, PhD
Cohen, Jon - BA, MA, PhD
Dewees, Donald - LLB, BScEE, PhD
Faig, Miquel - MEC, PhD
Gunderson, Morley - BA, MA, PhD
Hollander, Samuel - BSc, PhD
Reid, Frank - BA, MSc, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members
Arteaga Cabrales, Carolina - PhD, PhD
Bau, Natalie - BA, PhD
Celik, Murat - PhD
Chen, Yanyou - MA
Goldman, Jim - BS, MSc, PhD
Hussain, Ajaz - BA, PhD
Jayaraman, Raji - BA, MA, PhD
Koffi, Marlene - MSc
Price, David - BA, MA, PhD
Roesler, Anne-Katrin - PhD
Serafinelli, Michel - BA, MA, PhD, PhD
Shang, Ce - PhD
Tian, Xu - BA, MA, PhD
Tsoy, Anton - PhD
Van Effenterre, Clementine - PhD
Vivalt, Eva - MA, MPH, PhD
Zarate Vasquez, Roman Andres - BA, MA, PhD

Economics: Economics MA

Master of Arts

Program Description

The MA is a coursework-only program (i.e., has no thesis requirement) that may be taken on a full-time or part-time basis. It is designed for individuals who wish to work in the public, private, and not-for-profit sectors, and also for students intending to pursue a PhD in economics.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Economics' additional admission requirements stated below.
- An appropriate bachelor's degree with at least a mid-B (75%) standing in the final year of the program.
- Successful completion of full-year courses in calculus, intermediate microeconomics, intermediate macroeconomics, and statistics.
- Admission is competitive, so accepted applicants will normally have achieved a standing considerably higher than the minimum of at least a mid-B (75%) in the final year.
- All applicants who do not hold a degree from a Canadian university must submit an official Graduate Record Examination (GRE) General Test score. Applicants who hold a degree from a Canadian university are strongly encouraged to submit an official GRE General Test score. See the departmental website for details.

Program Requirements

- Successful completion of 4.5 full-course equivalents (FCEs) as follows:
  - 0.5 FCE mathematics and statistics course (ECO1010H);
  - 4.0 FCEs including the core courses in micro (ECO1200H), macro (ECO1100H), and econometrics (ECO1400H). Five 0.5 FCE elective courses are selected from current courses or may be graduate courses offered by another unit, provided they make a strong contribution to the student's economic training. At most two (1.0 FCE) of the five courses may be offered by another unit, and these courses must be approved by the Associate Chair, Graduate Studies. Units that offer courses that we may approve include Mathematics, Statistical Sciences, and the Rotman School of Management.
  - An MA student may be permitted to fulfill core course requirements by taking the corresponding PhD-level core courses (ECO2200H and ECO2201H for microeconomics, ECO2100H and ECO2101H for macroeconomics, or ECO2400H and ECO2401H for econometrics). To make this substitution, the student will be required to take the PhD-level ECO2010H (mathematics and statistics course), and must obtain written permission from the Associate Chair, Graduate Studies prior to starting the mathematics and statistics course in August.

Program Length

2 sessions full-time (typical registration sequence: F/W);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time
Economics: Economics PhD

Doctor of Philosophy

Program Description

The Department of Economics offers two PhD programs: a regular-entry program for students who have completed a master's degree in economics or a closely related field, and a direct-entry program for students with only an undergraduate degree. Both are full-time programs.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Economics' additional admission requirements stated below.
- Minimum B+ standing in an MA program in economics. Admission is competitive, so accepted applicants will normally have achieved a standing considerably higher than the minimum B+.
- A strong preparation in advanced mathematics, statistics, and economics, including successful completion of MA-level microeconomic theory, macroeconomic theory, and econometrics.
- All applicants who do not hold a degree from a Canadian university must submit an official Graduate Record Examination (GRE) General Test score. Applicants who hold a degree from a Canadian university are strongly encouraged to submit an official GRE General Test score. See the departmental website for details.

Program Requirements

- Students must maintain a minimum average of B+ throughout their coursework and successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - **Year 1**: 3.0 FCEs, normally consisting of two half courses in each area:
    - Microeconomics (ECO2200H and ECO2201H)
    - Macroeconomics (ECO2100H and ECO2101H)
    - Econometrics (ECO2400H and ECO2401H)
  - **Year 2**: at least two half courses (1.0 FCE), including the required courses for a major field of specialization and a minor field of specialization.
    - Students must write an original paper in Year 2 and present it in the relevant workshop in the Fall session of Year 3.
    - Students must also take ECO4060Y0 Graduate Research Seminar (1.0 FCE) in Year 2 and complete it by the end of Year 3.
    - Suitable PhD-level courses taken by a student in the MA program in the Department of Economics may, with the permission of the Associate Chair, Graduate Studies, fulfill a portion of the major and minor field requirements of the PhD program.
- A thesis based on original research.
- **General examinations**
  - Successful completion of theory comprehensive examinations. Students are required to take two comprehensive examinations in microeconomic and macroeconomic theory after the end of the Winter session (usually June) in Year 1 of their program. Performance on these exams is evaluated on a distinction/pass/fail basis. If a theory comprehensive examination is failed on the first attempt, it must be re-taken later in the Summer (usually in August) of the same year.
  - If a student does not obtain a minimum grade of A in every course required for their major field of specialization, or took some of the required courses during their MA in Economics program at the University of Toronto, the student is required to take a field comprehensive examination in their major field of specialization after the end of the Winter session in Year 2 (usually June). If the exam is failed, it must be re-taken later in the Summer (usually in August) of the same year. The major fields of specialization offered regularly are:
    - Behavioural Economics
    - Econometrics
    - Economic Development
    - Financial Economics
    - Industrial Organization
    - International Economics
    - Labour Economics
    - Macroeconomics
    - Microeconomic Theory
    - Public Economics.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Economics' additional admission requirements stated below.
- Minimum A– standing in the last two years of study in a bachelor's program in economics or a related field, such as finance, statistics, or mathematics. Because admission is competitive, accepted applicants will normally have achieved a standing considerably higher than the minimum A–.
- A strong preparation in advanced mathematics, statistics, and economics.
- All applicants who do not hold a degree from a Canadian university must submit an official Graduate Record Examination (GRE) General Test score. Applicants who hold a degree from a Canadian university are strongly encouraged to submit an official GRE General Test score. See the departmental website for details.
Program Requirements

- Students must maintain a minimum average of B+ throughout their coursework and successfully complete a total of 6.0 full-course equivalents (FCEs) as follows:
  - **Year 1:** normally two half courses in each area (3.0 FCEs), as follows:
    - Microeconomics (ECO2200H and ECO2201H)
    - Macroeconomics (ECO2100H and ECO2101H)
    - Econometrics (ECO2400H and ECO2401H)
  - **Year 2:** six half courses (3.0 FCEs), including the required courses for a major field of specialization and a minor field of specialization.
    - Students must write an original paper in Year 2 and present it in the relevant workshop in the Fall session of Year 3.
    - Students must also take ECO4060Y0 Graduate Research Seminar (1.0 FCE) in Year 2 and complete it by the end of Year 3.

- A thesis based on original research.

- **General examinations.**
  - Successful completion of theory comprehensive examinations. Students must take two comprehensive examinations in microeconomic and macroeconomic theory after the end of the Winter session (usually June) in Year 1 of their program. Performance on these exams is evaluated on a distinction/pass/fail basis. If a theory comprehensive examination is failed on the first attempt, it must be re-taken later in the Summer (usually in August) of the same year.
  - If a student does not obtain a minimum grade of A in every course required for their major field of specialization, the student must take a field comprehensive examination in their major field of specialization after the end of the Winter session in Year 2 (usually June). If the exam is failed, it must be re-taken later in the Summer (usually in August) of the same year. The major fields of specialization offered regularly are:
    - Behavioural Economics
    - Econometrics
    - Economic Development
    - Financial Economics
    - Industrial Organization
    - International Economics
    - Labour Economics
    - Macroeconomics
    - Microeconomic Theory
    - Public Economics.

Program Length

- 5 years

Time Limit

- 7 years

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Economics: Economics MA, PhD Courses

Not all courses are offered every year. Please refer to the department's website for a current course list.

Preliminary Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO1010H</td>
<td>Mathematics and Statistics for MA and MFE Students (Credit/No Credit)</td>
</tr>
<tr>
<td>ECO2010H</td>
<td>Mathematics and Statistics for PhD Students (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Core Courses in Economic Theory

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO1100H</td>
<td>Economic Theory — Macro (for MA students only)</td>
</tr>
<tr>
<td>ECO1200H</td>
<td>Economic Theory — Micro (for MA students only)</td>
</tr>
<tr>
<td>ECO2100H</td>
<td>Macroeconomic Theory I</td>
</tr>
<tr>
<td>ECO2101H</td>
<td>Macroeconomic Theory II (prerequisite: ECO2100H)</td>
</tr>
<tr>
<td>ECO2105H</td>
<td>Applied Macroeconomics (co-requisites: ECO2100H and ECO2101H)</td>
</tr>
<tr>
<td>ECO2200H</td>
<td>Microeconomic Theory I</td>
</tr>
<tr>
<td>ECO2201H</td>
<td>Microeconomic Theory II (prerequisite: ECO2200H)</td>
</tr>
<tr>
<td>ECO2205H</td>
<td>Applied Microeconomics (co-requisites: ECO2200H and ECO2201H)</td>
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</table>

Advanced Microeconomic Theory

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECO3200H</td>
<td>Advanced Microeconomic Theory I (prerequisites: ECO2200H and ECO2201H)</td>
</tr>
<tr>
<td>ECO3201H</td>
<td>Advanced Microeconomic Theory II</td>
</tr>
<tr>
<td>ECO3202H</td>
<td>Topics in Microeconomic Theory</td>
</tr>
<tr>
<td>ECO3210H</td>
<td>Economics of Organizations and Contracts</td>
</tr>
</tbody>
</table>

Behavioural and Experimental Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECO1250H</td>
<td>Topics in Behavioural Economics</td>
</tr>
<tr>
<td>ECO3250H</td>
<td>Behavioural Economics</td>
</tr>
</tbody>
</table>

Econometrics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO1400H</td>
<td>Econometrics (for MA students only)</td>
</tr>
<tr>
<td>ECO1450H</td>
<td>Methods for Empirical Microeconomics (exclusions: ECO439H, ECO2803H)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>ECO2400H</td>
<td>Econometrics I</td>
</tr>
<tr>
<td>ECO2401H</td>
<td>Econometrics II (prerequisite: ECO1400H or ECO2400H)</td>
</tr>
<tr>
<td>ECO2404H</td>
<td>Empirical Applications of Economic Theory (exclusion: ECO418H)</td>
</tr>
<tr>
<td>ECO2405H</td>
<td>Applied Econometrics (co-requisites: ECO2400H and ECO2401H)</td>
</tr>
<tr>
<td>ECO2411H</td>
<td>Financial Econometrics (exclusion: ECO462H)</td>
</tr>
<tr>
<td>ECO2460H</td>
<td>Economic Applications of Machine Learning</td>
</tr>
<tr>
<td>ECO3400H</td>
<td>Topics in Econometrics</td>
</tr>
<tr>
<td>ECO3401H</td>
<td>Advanced Econometrics</td>
</tr>
<tr>
<td>ECO3450H</td>
<td>Advanced Methods for Empirical Microeconomics</td>
</tr>
<tr>
<td>ECO1700H</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECO1730H</td>
<td>Economic Development of China (exclusion: ECO435H)</td>
</tr>
<tr>
<td>ECO2701H</td>
<td>Advanced Development Economics</td>
</tr>
<tr>
<td>ECO1500H</td>
<td>Financial Economics: Asset Pricing (exclusion: ECO419H)</td>
</tr>
<tr>
<td>ECO1501H</td>
<td>Financial Economics: Corporate Finance</td>
</tr>
<tr>
<td>ECO1502H</td>
<td>Empirical Methods for Financial Economics (exclusion: ECO464H)</td>
</tr>
<tr>
<td>ECO1550H</td>
<td>Economics of Financial Risk Management (exclusions: ECO461H, RSM435H)</td>
</tr>
<tr>
<td>ECO1551H</td>
<td>Topics in Risk Management</td>
</tr>
<tr>
<td>ECO1900H</td>
<td>Industrial Organization and Competition Policy</td>
</tr>
<tr>
<td>ECO3900H</td>
<td>Industrial Organization I</td>
</tr>
<tr>
<td>ECO3901H</td>
<td>Industrial Organization II</td>
</tr>
<tr>
<td>ECO1300H</td>
<td>International Macroeconomics</td>
</tr>
<tr>
<td>ECO1301H</td>
<td>International Financial Markets</td>
</tr>
<tr>
<td>ECO2302H</td>
<td>Networks in Trade and Macroeconomics</td>
</tr>
<tr>
<td>ECO3300H</td>
<td>International Trade Theory</td>
</tr>
<tr>
<td>ECO3301H</td>
<td>International Trade II (prerequisite: ECO3300H)</td>
</tr>
<tr>
<td>ECO3302H</td>
<td>Topics in International Trade</td>
</tr>
<tr>
<td>ECO3304H</td>
<td>International Monetary Theory</td>
</tr>
<tr>
<td>ECO2802H</td>
<td>Economics Inside Organizations</td>
</tr>
<tr>
<td>ECO2804H</td>
<td>Social Economics</td>
</tr>
<tr>
<td>ECO3800H</td>
<td>Labour Economics I</td>
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<tr>
<td>ECO3801H</td>
<td>Labour Economics II</td>
</tr>
<tr>
<td>ECO1102H</td>
<td>Macroeconometric Models for Policy Analysis and Forecasting (exclusion: ECO416H)</td>
</tr>
<tr>
<td>ECO2104H</td>
<td>Quantitative Macroeconomics</td>
</tr>
<tr>
<td>ECO2107H</td>
<td>Monetary Theory</td>
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<tr>
<td>ECO2120H</td>
<td>Topics in Growth and Development</td>
</tr>
<tr>
<td>ECO3100H</td>
<td>Frontiers in Macroeconomics (prerequisites: ECO2100H and ECO2201H)</td>
</tr>
<tr>
<td>ECO3101H</td>
<td>Topics in Macroeconomic Theory</td>
</tr>
<tr>
<td>ECO3102H</td>
<td>Topics in Business Cycles (exclusion: ECO438H)</td>
</tr>
<tr>
<td>ECO2600H</td>
<td>Public Economics I</td>
</tr>
<tr>
<td>ECO2601H</td>
<td>Public Economics II</td>
</tr>
<tr>
<td>ECO2607H</td>
<td>Economics of Education Policy</td>
</tr>
<tr>
<td>ECO2610H</td>
<td>Health Economics</td>
</tr>
<tr>
<td>ECO2611H</td>
<td>Empirical Welfare Analysis</td>
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<tr>
<td>ECO2620H</td>
<td>Topics in Health Economics</td>
</tr>
<tr>
<td>ECO1320H</td>
<td>International Trade Regulation (exclusions: ECO459H and LAW285H/LAW2038H)</td>
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<tr>
<td>ECO1950H</td>
<td>Economic Analysis of Law</td>
</tr>
<tr>
<td>ECO1960H</td>
<td>Energy and Regulation (exclusion: ECO414H)</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>ECO2650H</td>
<td>Political Economy (exclusion: ECO434H)</td>
</tr>
<tr>
<td>ECO2850H</td>
<td>Urban and Regional Economics</td>
</tr>
<tr>
<td>ECO4050H</td>
<td>Special Field Reading Course#</td>
</tr>
<tr>
<td>ECO4051H</td>
<td>Special Field Reading Course#</td>
</tr>
<tr>
<td>ECO4060Y0</td>
<td>Graduate Research Seminar (Credit/No Credit)</td>
</tr>
</tbody>
</table>

* The department is normally prepared to supervise reading courses in a variety of fields. Reading courses are available only to students who have the requisite preparation and only at the discretion of faculty members.

0 Course that may continue over a program. The course is graded when completed.
Electrical and Computer Engineering

Electrical and Computer Engineering: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Electrical and Computer Engineering

MASc

- Fields:
  - Biomedical Engineering;
  - Communications;
  - Computer Engineering;
  - Electromagnetics;
  - Electronics;
  - Energy Systems;
  - Photonics;

- Emphases:
  - Robotics;
  - Sustainable Energy

MEng

- Emphases:
  - Analytics;
  - Biomedical Engineering;
  - Communications;
  - Computer Engineering;
  - Electromagnetics;
  - Electronics;
  - Energy Systems;
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  - Identity, Privacy and Security (IPS);
  - Photonics;
  - Robotics;
  - Sustainable Energy;
  - Systems Control

PhD

- Fields:
  - System Control
  - Biomedical Engineering;
  - Communications;
  - Computer Engineering;
  - Electromagnetics;
  - Electronics;
  - Energy Systems;
  - Photonics;

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Electrical and Computer Engineering, MASc, PhD
- Psychology and Engineering
  - Electrical and Computer Engineering, MASc, PhD

Overview

During the past few decades, we have witnessed exciting new discoveries and developments in almost every aspect of electrical and computer engineering, including microelectronics, computers, communication networks, photonics, alternative energy systems, robotics, and many others. At the intersection of computers and communications there are opportunities that are limited only by our imagination. Along with these highly visible developments, there are equally impressive achievements in building the theoretical underpinnings of the respective areas of knowledge. Graduate studies provide the highly qualified individuals who are the lifeblood of the research leading to these advances.

The Department of Electrical and Computer Engineering is engaged in the pursuit and dissemination of knowledge across a wide range of areas of engineering and applied science — from the fabrication of atomic-level structures with special optical properties, through to the technologies that have revolutionized our world, such as microelectronics, computer systems, software, and networks.

The department conducts research in the following fields of study: Biomedical Engineering, Communications, Computer Engineering, Electromagnetics, Electronics, Energy Systems, Photonics, and System Control.

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Zukotynski, Stefan - MASc, PhD
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Chisholm, William - BASc, MEng, PhD
Eckford, Andrew - BE, MASc, PhD
Jeffrey, Mark Christopher - PhD, PhD
Lawryshyn, Yuri - Diplng, BASc, MASc, MBA, PhD
Ma, Tom - PhD
Makhlazi, Aizereza - PhD
Matsuura, Naomi - ME, PhD
Papernot, Nicolas - BS, MSc, PhD
Strauss, John - MD
Valiante, Taufik - BSc, MD, PhD
Yadollahi, Azadeh - DrEng
Electrical and Computer Engineering: Electrical and Computer Engineering MASc

Master of Applied Science

Program Description

The MASc provides students with an opportunity to pursue advanced studies in the particular area of interest and an opportunity to engage in research.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer Engineering's additional admission requirements stated below.
- An appropriate bachelor's degree in electrical and computer engineering or its equivalent from a recognized university.
- High academic standing equivalent to a mid-B or better, normally demonstrated by an average grade in the final year or over senior-level courses.

Program Requirements

- Each student's program of study must receive the approval of the Department of Electrical and Computer Engineering and, in general, shall consist of a research or design project on which a thesis must be submitted.
- During Year 1, students are required to attend the ECE Colloquium and complete JDE1000H Ethics in Research (0.0 FCE).
- **Coursework.** Normally, completion of 2.5 graduate full-course equivalents (FCEs) or five half courses. Students whose undergraduate preparation does not include the study of subjects deemed to be necessary for research in the chosen area will be required to complete additional courses.
- **Thesis.** This thesis shall demonstrate the student's ability to do independent work in relating, organizing, and extending existing techniques where required, and in suggesting and developing new approaches to problems in an area of applied science and engineering.
- Students have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

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Electrical and Computer Engineering: Electrical and Computer Engineering MEng

Master of Engineering

Program Description

The MEng program is designed to provide professional training beyond the undergraduate level and to accelerate careers with specialized engineering expertise needed in business, government, and industry.

The MEng program can be taken on a full-time, extended full-time, or part-time basis.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer Engineering's additional admission requirements stated below.
- An appropriate bachelor's degree in electrical and computer engineering or its equivalent from a recognized university.
- High academic standing equivalent to a mid-B or better, normally demonstrated by an average grade in the final year or over senior-level courses.

Program Requirements

- **Coursework.** Normally, completion of 4.5 graduate full-course equivalents (FCEs) or nine half courses for applicants with adequate undergraduate preparation. At least 2.5 graduate FCEs or five half courses must be drawn from graduate courses offered by the Department of Electrical and Computer Engineering.
- Students may choose to complete an engineering project with an equivalent value of 1.5 FCEs. Students choosing the project option will be required to complete a total of 3.0 FCEs in addition to the project. In order to pursue the project option, the student must secure a professor who will act as the supervisor throughout the project.
- Students have the option of completing an emphasis in Analytics; Biomedical Engineering; Communications; Computer Engineering; Electromagnetics; Electronics; Energy Systems; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Identity, Privacy and Security (IPS); Photonics; Robotics; Sustainable Energy; or Systems Control as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.
Program Length

3 sessions (typical registration sequence: F/W/S)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer Engineering's additional admission requirements stated below.
- An appropriate bachelor's degree in electrical and computer engineering or its equivalent from a recognized university.
- High academic standing equivalent to a mid-B or better, normally demonstrated by an average grade in the final year or over senior-level courses.

Program Requirements

- Students are expected to complete the requirements in six sessions (two years) and are limited to six half courses per year and three half courses per session.
- Coursework. Normally, completion of 4.5 graduate full-course equivalents (FCEs) or nine half courses for applicants with adequate undergraduate preparation. At least 2.5 graduate FCEs or five half courses must be drawn from graduate courses offered by the Department of Electrical and Computer Engineering.
- Students may choose to complete an engineering project with an equivalent value of 1.5 FCEs. Students choosing the project option will be required to complete a total of 3.0 FCEs in addition to the project. In order to pursue the project option, the student must secure a professor who will act as the supervisor throughout the project.
- Students have the option of completing an emphasis in Analytics; Biomedical Engineering; Communications; Computer Engineering; Electromagnetics; Electronics; Energy Systems; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Identity, Privacy and Security (IPS); Photonics; Robotics; Sustainable Energy; or Systems Control as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer Engineering's additional admission requirements stated below.
- An appropriate bachelor's degree in electrical and computer engineering or its equivalent from a recognized university.
- High academic standing equivalent to a mid-B or better, normally demonstrated by an average grade in the final year or over senior-level courses.

Program Requirements

- Students normally complete the requirements in nine sessions (three years). They are limited to four half courses per year and two half courses per session.
- Coursework. Normally, completion of 4.5 graduate full-course equivalents (FCEs) or nine half courses for applicants with adequate undergraduate preparation. At least 2.5 graduate FCEs or five half courses must be drawn from graduate courses offered by the Department of Electrical and Computer Engineering.
- Students may choose to complete an engineering project with an equivalent value of 1.5 FCEs. Students choosing the project option will be required to complete a total of 3.0 FCEs in addition to the project. In order to pursue the project option, the student must secure a professor who will act as the supervisor throughout the project.
- Students have the option of completing an emphasis in Analytics; Biomedical Engineering; Communications; Computer Engineering; Electromagnetics; Electronics; Energy Systems; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Identity, Privacy and Security (IPS); Photonics; Robotics; Sustainable Energy; or Systems Control as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Program Length

9 sessions

Time Limit

6 years
Electrical and Computer Engineering: 
Electrical and Computer Engineering PhD

Doctor of Philosophy

Program Description

The PhD program is designed for exceptional individuals who intend to pursue a career in fundamental or applied research.

Applicants may enter the PhD program via one of three routes: 1) following completion of the University of Toronto master's degree in Electrical and Computer Engineering or its equivalent from a recognized university; 2) transfer from the University of Toronto MASc program; or 3) direct entry for exceptionally qualified students with an appropriate bachelor's degree from a recognized university.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer Engineering's additional admission requirements stated below.
- Admission may be granted for applicants with a University of Toronto master's degree in Electrical and Computer Engineering with an overall average of at least B+, or its equivalent from a recognized university.
- The department must be satisfied of the student’s ability to do advanced research before admission may be granted.

Program Requirements

- **Coursework.** Normally, students who enter the PhD with a master’s degree will complete 2.5 full-course equivalents (FCEs) not previously used for other degree credit. Students may receive a course reduction of up to 1.0 FCE depending on their PhD research needs in relation to their studies at the master's level. The number of required courses will be determined by the Associate Chair, Graduate Studies, in consultation with the PhD supervisor.
- During Year 1, each student must:
  - pass a **qualifying oral examination** in the area of research;
  - attend the ECE Colloquium;
  - complete JDE1000H *Ethics in Research* (0.0 FCE) if they have not already done so in a previous University of Toronto master's program.
- **Thesis.**
- Students have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Program Length

4 years

Time Limit

6 years

PhD Program (Transfer)

Transfer Requirements

- Admission may be granted to applicants via transfer from the MASc to the PhD program, upon completion of 2.5 graduate full-course equivalents (FCEs) with an overall average of at least B+.

Program Requirements

- **Coursework.** Normally, students who transfer from the MASc to the PhD will complete 1.5 graduate FCEs, in addition to courses completed while registered in the MASc program. Students may be required to complete up to 1.0 additional FCE depending on their PhD research needs in relation to their studies at the master's level. The number of required courses will be determined by the Associate Chair, Graduate Studies, in consultation with the PhD supervisor.
- During Year 1, each student must:
  - pass a **qualifying oral examination** in the area of research;
  - attend the ECE Colloquium;
  - complete JDE1000H *Ethics in Research* (0.0 FCE) if they have not already done so in a previous University of Toronto master's program.
- **Thesis.**
- Students have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Program Length

5 years

Time Limit

7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Electrical and Computer...
Engineering’s additional admission requirements stated below.
• Admission may be granted by direct entry for exceptionally qualified students with an appropriate bachelor's degree from a recognized university.
• The department must be satisfied of the student's ability to do advanced research before admission may be granted.

Program Requirements

• **Coursework.** Students must complete **4.0 graduate full-course equivalents (FCEs).**
  - During Year 1, each student must:
    - pass a qualifying oral examination in the area of research;
    - attend the ECE Colloquium;
    - complete JDE1000H *Ethics in Research* (0.0 FCE) if they have not already done so in a previous University of Toronto master's program.
• **Thesis.**
  - Students have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Electrical and Computer Engineering MASc, MEng, PhD Emphases section.

Program Length

- **5 years**

Time Limit

- **7 years**

Electrical and Computer Engineering: Electrical and Computer Engineering MASc, MEng, PhD Emphases

**Emphasis: Analytics (MEng only)**

To be admitted to the emphasis in Analytics, MEng students must first successfully complete a **prerequisite course APS1070H (0.5 full-course equivalent [FCE]).**

Subsequently, to earn the emphasis, students must successfully complete **four additional half courses (2.0 FCEs)** from the list of core courses or elective courses. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Students must have completed the prerequisite course APS1070H before taking any of the core courses.

**Prerequisite Course**

APS1070H *Foundations of Data Analytics and Machine Learning.*

**Core Courses**

CHE1147H *Data Mining in Engineering*
MIE1624H *Introduction to Data Science and Analytics*
MSE1065H *Application of Artificial Intelligence in Materials Design* (exclusion: MSE1063H).

**Elective Courses**


**Emphasis: Biomedical Engineering (MEng only)**

MEng students must successfully complete **at least four courses** from those listed below. Students may double-count one course at most towards any ECE emphasis.

- Any JEB14XXH course
- ECE1774H *Sensory Cybernetics*
- ECE2500Y *Master of Engineering Project* (topic in biomedical engineering; counts as one course towards the emphasis).

Students may include other biomedical engineering-related courses subject to the approval of the ECE Associate Chair for Graduate Studies.

**Emphasis: Communications (MEng only)**

MEng students must successfully complete **at least four courses** from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE537H *Random Processes*
- Any ECE15XXH course
- ECE2500Y *Master of Engineering Project* (topic in communications; counts as one course towards the emphasis).
Emphasis: Computer Engineering (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE516H Intelligent Image Processing
- ECE532H Digital Systems Design
- ECE540H Optimizing Compilers
- ECE552H Computer Architecture
- ECE568H Computer Security
- Any ECE17XXH course
- ECE2500Y Master of Engineering Project (topic in computer engineering; counts as one course towards the emphasis).

Emphasis: Electromagnetics (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- Any ECE12XXH course
- ECE2500Y Master of Engineering Project (topic in electromagnetics; counts as one course towards the emphasis).

Emphasis: Electronics (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE530H Analog Integrated Circuits
- Any ECE13XXH course
- ECE2500Y Master of Engineering Project (topic in electronics; counts as one course towards the emphasis).

Emphasis: Energy Systems (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE510H Introduction to Lighting Systems
- ECE514H Power Electronics: Converter Topologies
- ECE533H Power Electronics
- Any ECE10XXH course
- ECE2500Y Master of Engineering Project (topic in energy systems; counts as one course towards the emphasis).

Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.

Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)'s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.

Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcripts should contact the Faculty Graduate Studies office.

Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

Leadership


Entrepreneurship and Innovation


Finance and Management


Engineering and Society

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.
Emphasis: Identity, Privacy and Security (IPS) (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) as follows:

- JIE1001H/ECE1518H Seminar in Identity, Privacy, and Security (0.5 FCE)
- Two courses (1.0 FCE) from:
  - ECE568H, ECE1517H, ECE1529H, ECE1776H, ECE1778H
- And one course (0.5 FCE) from:
  - INF2124H, INF2181H, INF2241H.

Emphasis: Photonics (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE527H Photonic Devices
- Any ECE14XXH course
- ECE2500Y Master of Engineering Project (topic in photonics; counts as one course towards the emphasis).

Emphasis: Robotics (MASc, MEng, PhD)

Students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least two of the following groups, and no more than two in any given group:

Group 1: Planning and Control

AER1516H, AER1517H,
ECE557H (exclusion: ECE410H), ECE1619H, ECE1635H,
ECE1636H, ECE1647H, ECE1653H, ECE1657H,
MIE1064H, MIE1068H.

Group 2: Perception and Learning

AER1513H, AER1515H,
CSC2503H, CSC2506H, CSC2515H, CSC2541H, CSC2548H,
ECE516H, ECE521H, ECE1511H, ECE1512H,
JEB1433H, ROB501H.

Group 3: Modelling and Dynamics

AER1503H, AER1512H, AER506H,
JEB1444H,
MIE1001H.

Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from either of the following lists below.
- A thesis towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- Four half courses (2.0 FCEs) from either of the following lists below, including at least one core course (0.5 FCE).

Core Courses

APS1032H Introduction to Energy Project Management,
MIE515H Alternative Energy Systems,
MIE1120H Current Energy Infrastructure and Resources.

Elective Courses

AER507H, AER1304H, AER1315H, AER1415H,
CHE568H, CHE1053H, CHE1118H, CHE1123H, CHE1142H,
CHE1143H,
CIV575H, CIV576H, CIV577H, CIV1303H, CIV1307H,
ECE533H, ECE1030H, ECE1055H, ECE1057H, ECE1059H,
ECE1085H, ECE1086H, ECE1092H, ECE1094H, ECE1476H,
MIE516H, MIE317H, MIE128H, MIE1129H, MIE1130H,
MIE1240H, MIE1241H, MIE1715H,
MSE1023H, MSE1028H, MSE1058H.

Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.

Emphasis: Systems Control (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

Group 4: Systems Design and Integration

AER525H (exclusion: ECE470H), AER1216H, AER1217H,
CSC2621H,
ECE470H (exclusion: AER525H),
MIE505H, MIE506H, MIE1070H, MIE1075H, MIE1076H,
MIE1080H, MIE1809H,
ROB521H, ROB1514H.

Emphasis: Identity, Privacy and Security (IPS) (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) as follows:

- JIE1001H/ECE1518H Seminar in Identity, Privacy, and Security (0.5 FCE)
- Two courses (1.0 FCE) from:
  - ECE568H, ECE1517H, ECE1529H, ECE1776H, ECE1778H
- And one course (0.5 FCE) from:
  - INF2124H, INF2181H, INF2241H.

Emphasis: Photonics (MEng only)

MEng students must successfully complete at least four courses from those listed below. Students may double-count one course at most towards any ECE emphasis.

- ECE527H Photonic Devices
- Any ECE14XXH course
- ECE2500Y Master of Engineering Project (topic in photonics; counts as one course towards the emphasis).

Emphasis: Robotics (MASc, MEng, PhD)

Students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least two of the following groups, and no more than two in any given group:

Group 1: Planning and Control

AER1516H, AER1517H,
ECE557H (exclusion: ECE410H), ECE1619H, ECE1635H,
ECE1636H, ECE1647H, ECE1653H, ECE1657H,
MIE1064H, MIE1068H.

Group 2: Perception and Learning

AER1513H, AER1515H,
CSC2503H, CSC2506H, CSC2515H, CSC2541H, CSC2548H,
ECE516H, ECE521H, ECE1511H, ECE1512H,
JEB1433H, ROB501H.

Group 3: Modelling and Dynamics

AER1503H, AER1512H, AER506H,
JEB1444H,
MIE1001H.
Electrical and Computer Engineering: Electrical and Computer Engineering MASc, MEng, PhD Courses

The following groups of courses in the more distinct fields of graduate study in electrical and computer engineering are presented for student guidance in selecting courses. Suitable courses offered by other departments may be selected subject to the approval of the Department of Electrical and Computer Engineering. Students registered in a graduate degree program which involves research are required to complete the seminar course JDE1000H Ethics in Research during their first year of registration. The department should be consulted each session as to course offerings.

### Energy Systems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECE533H</td>
<td>Power Electronics</td>
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<tr>
<td>ECE1030H</td>
<td>Space Vector Theory and Control</td>
</tr>
<tr>
<td>ECE1049H</td>
<td>Special Topics in Energy Systems</td>
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<tr>
<td>ECE1055H</td>
<td>Dynamics of HVdc/ac Transmission Systems</td>
</tr>
<tr>
<td>ECE1066H</td>
<td>Design of High-Frequency Switch-Mode Power Supplies (SMPS)</td>
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<tr>
<td>ECE1068H</td>
<td>Introduction to EMC</td>
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<tr>
<td>ECE1085H</td>
<td>Power System Optimization</td>
</tr>
<tr>
<td>ECE1086H</td>
<td>Power Management for Photovoltaic Systems</td>
</tr>
<tr>
<td>ECE1094H</td>
<td>Power System Operations and Economics</td>
</tr>
</tbody>
</table>

### Electromagnetics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECE1228H</td>
<td>Electromagnetic Theory</td>
</tr>
<tr>
<td>ECE1229H</td>
<td>Advanced Antenna Theory</td>
</tr>
<tr>
<td>ECE1243H</td>
<td>Topics in Electromagnetic Waves</td>
</tr>
<tr>
<td>ECE1252H</td>
<td>Introduction to Computational Electrodynamics</td>
</tr>
<tr>
<td>ECE1254H</td>
<td>Modeling of Multiphysics Systems</td>
</tr>
<tr>
<td>ECE1256H</td>
<td>Microwave Circuits</td>
</tr>
</tbody>
</table>

### Electronics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECE534H</td>
<td>Integrated Circuit Engineering</td>
</tr>
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### Biomedical Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JEB1365H</td>
<td>Ultrasound: Theory and Applications in Biology and Medicine</td>
</tr>
<tr>
<td>JEB1433H</td>
<td>Medical Imaging</td>
</tr>
<tr>
<td>JEB1444H</td>
<td>Neural Engineering</td>
</tr>
<tr>
<td>JEB1447H</td>
<td>Sensory Communications</td>
</tr>
<tr>
<td>MIE1452H</td>
<td>Signal Processing for Bioengineering</td>
</tr>
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### Photonics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECE525H</td>
<td>Lasers and Detectors</td>
</tr>
<tr>
<td>ECE527H</td>
<td>Passive Photonic Devices</td>
</tr>
<tr>
<td>ECE1448H</td>
<td>Quantum Mechanics for Engineers</td>
</tr>
<tr>
<td>ECE1450H</td>
<td>Ultrafast Photonics</td>
</tr>
<tr>
<td>ECE1460H</td>
<td>Special Topics in Photonics</td>
</tr>
<tr>
<td>ECE1461H</td>
<td>Advanced Laser Processing</td>
</tr>
<tr>
<td>ECE1467H</td>
<td>Integrated Optical Circuit Design</td>
</tr>
<tr>
<td>ECE1473H</td>
<td>Micro and Nano Fabrication Technologies for Compound Semiconductors</td>
</tr>
</tbody>
</table>

### Other Courses

- **ECE557H Systems Control**
- **Any ECE16XXH course**
- **ECE2500Y Master of Engineering Project** (topic in systems control; counts as one course towards the emphasis).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE1475H</td>
<td>Bio Photonics</td>
</tr>
<tr>
<td>ECE1476H</td>
<td>Solar Energy Capture and Storage in Natural and Engineered Systems</td>
</tr>
<tr>
<td>ECE1477H</td>
<td>Optical Interconnects</td>
</tr>
<tr>
<td>ECE1478H</td>
<td>Lasers and Detectors</td>
</tr>
</tbody>
</table>

### Communications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECE537H</td>
<td>Random Processes</td>
</tr>
<tr>
<td>ECE1501H</td>
<td>Error Control Codes</td>
</tr>
<tr>
<td>ECE1502H</td>
<td>Information Theory</td>
</tr>
<tr>
<td>ECE1503H</td>
<td>Graphs, Error-Correction Coding, and Inference</td>
</tr>
<tr>
<td>ECE1504H</td>
<td>Statistical Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, and ECE1513H)</td>
</tr>
<tr>
<td>ECE1505H</td>
<td>Convex Optimization</td>
</tr>
<tr>
<td>ECE1508H</td>
<td>Special Topics in Communications</td>
</tr>
<tr>
<td>ECE1511H</td>
<td>Signal Processing</td>
</tr>
<tr>
<td>ECE1512H</td>
<td>Digital Image Processing and Applications</td>
</tr>
<tr>
<td>ECE1513H</td>
<td>Introduction to Machine Learning (prerequisites: STA286H or ECE302H or equivalent; exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, and ECE1504H)</td>
</tr>
<tr>
<td>ECE1517H</td>
<td>Biometric Systems</td>
</tr>
<tr>
<td>ECE1518H</td>
<td>Seminar in Identity, Privacy, and Security</td>
</tr>
<tr>
<td>ECE1520H</td>
<td>Data Communications I</td>
</tr>
<tr>
<td>ECE1521H</td>
<td>Detection and Estimation Theory</td>
</tr>
<tr>
<td>ECE1522H</td>
<td>Data Communications II</td>
</tr>
<tr>
<td>ECE1529H</td>
<td>Adaptive Systems for Signal Processing and Communications</td>
</tr>
<tr>
<td>ECE1531H</td>
<td>Quantum Information Theory</td>
</tr>
<tr>
<td>ECE1541H</td>
<td>Communication Networks I</td>
</tr>
<tr>
<td>ECE1542H</td>
<td>Communication Networks II</td>
</tr>
<tr>
<td>ECE1543H</td>
<td>Mobile Communications Systems</td>
</tr>
<tr>
<td>ECE1545H</td>
<td>Bridges and Routers Planning</td>
</tr>
<tr>
<td>ECE1548H</td>
<td>Advanced Network Architectures</td>
</tr>
<tr>
<td>ECE1549H</td>
<td>Stochastic Networks</td>
</tr>
<tr>
<td>ECE1552H</td>
<td>Modern Mobile Air Interfaces (prerequisite: ECE316H)</td>
</tr>
</tbody>
</table>

### Systems Control

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE557H</td>
<td>Systems Control</td>
</tr>
<tr>
<td>ECE1619H</td>
<td>Linear Geometric Control Theory</td>
</tr>
<tr>
<td>ECE1635H</td>
<td>Special Topics in Control I</td>
</tr>
<tr>
<td>ECE1636H</td>
<td>Control of Discrete-Event Systems I</td>
</tr>
<tr>
<td>ECE1637H</td>
<td>Control of Discrete-Event Systems II</td>
</tr>
<tr>
<td>ECE1639H</td>
<td>Analysis and Control of Stochastic Systems I</td>
</tr>
<tr>
<td>ECE1647H</td>
<td>Introduction to Nonlinear Control Systems</td>
</tr>
<tr>
<td>ECE1648H</td>
<td>Nonlinear Control Systems</td>
</tr>
<tr>
<td>ECE1653H</td>
<td>Hybrid Systems and Control Applications</td>
</tr>
<tr>
<td>ECE1656H</td>
<td>Nonlinear Modeling and Analysis of Biological Systems</td>
</tr>
<tr>
<td>ECE1657H</td>
<td>Game Theory and Evolutionary Games</td>
</tr>
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### Computer Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECE516H</td>
<td>Personal Cybernetics and Intelligent Imaging Systems</td>
</tr>
<tr>
<td>ECE532H</td>
<td>Digital Hardware</td>
</tr>
<tr>
<td>ECE540H</td>
<td>Optimizing Compilers</td>
</tr>
<tr>
<td>ECE1718H</td>
<td>Special Topics in Computer Hardware Design</td>
</tr>
<tr>
<td>ECE1749H</td>
<td>Interconnection Networks for Parallel Computer Architectures</td>
</tr>
<tr>
<td>ECE1754H</td>
<td>Compilation Techniques for Parallel Processors</td>
</tr>
<tr>
<td>ECE1755H</td>
<td>Parallel Computer Architecture and Programming</td>
</tr>
<tr>
<td>ECE1756H</td>
<td>Reconfigurable Computing and FPGA Architecture</td>
</tr>
<tr>
<td>ECE1762H</td>
<td>Algorithms and Data Structures</td>
</tr>
<tr>
<td>ECE1767H</td>
<td>Design for Test and Testability</td>
</tr>
<tr>
<td>ECE1769H</td>
<td>Behavioural Synthesis of Digital Integrated Circuits</td>
</tr>
<tr>
<td>ECE1770H</td>
<td>Trends in Middleware Systems — Selected Topics and Concepts</td>
</tr>
<tr>
<td>ECE1771H</td>
<td>Quality of Service</td>
</tr>
<tr>
<td>ECE1774H</td>
<td>Sensory Cybernetics</td>
</tr>
<tr>
<td>ECE1776H</td>
<td>Computer Security, Cryptography, and Privacy</td>
</tr>
<tr>
<td>ECE1777H</td>
<td>Computer Methods for Circuit Simulation</td>
</tr>
<tr>
<td>ECE1778H</td>
<td>Creative Applications for Mobile Devices</td>
</tr>
<tr>
<td>ECE1780H</td>
<td>Advanced Mobile User Interfaces</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>ECE1781H</td>
<td>Dependable Software Systems (prerequisite: ECE344H Operating Systems or similar)</td>
</tr>
<tr>
<td>ECE1782H</td>
<td>Programming Massively Parallel Multiprocessors and Heterogeneous Systems</td>
</tr>
<tr>
<td>ECE1783H</td>
<td>Design Tradeoffs in Digital Systems</td>
</tr>
<tr>
<td>ECE1784H</td>
<td>Trustworthy Machine Learning</td>
</tr>
<tr>
<td>ECE1785H</td>
<td>Empirical Software Engineering</td>
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**Master of Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECE1092H</td>
<td>Smart Grid Case Studies</td>
</tr>
<tr>
<td>ECE1093H</td>
<td>Electrical Insulation Design and Coordination</td>
</tr>
<tr>
<td>ECE1095H</td>
<td>Grounding and Bonding</td>
</tr>
<tr>
<td>ECE1394H</td>
<td>Technical Management of Modern IC Design</td>
</tr>
<tr>
<td>ECE1524H</td>
<td>Service Provider Networks</td>
</tr>
<tr>
<td>ECE1551H</td>
<td>Mobile Broadband Radio Access Network (prerequisite: ECE316H; exclusion: ECE1508H)</td>
</tr>
<tr>
<td>ECE1779H</td>
<td>Introduction to Cloud Computing</td>
</tr>
<tr>
<td>ECE2500Y</td>
<td>Master of Engineering Project</td>
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**Reading Course**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>ECE1001H</td>
<td>Readings in Cognate Subjects</td>
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**APS Engineering Course**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1041H</td>
<td>Inventrepreneurship (Invention and Entrepreneurship)</td>
</tr>
<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
</tr>
<tr>
<td>APS1070H</td>
<td>Foundations of Data Analytics and Machine Learning</td>
</tr>
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</table>
English

English: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

English

MA

• Fields:
  o American Literature;
  o Aspects of Theory;
  o Canadian Literature;
  o Creative Writing;
  o Medieval Literature;
  o Renaissance Literature;
  o Restoration and Eighteenth-Century Literature;
  o Romantic and Victorian Literature;
  o Twentieth and Twenty-First Century British and Irish Literature;
  o World Literatures in English

PhD

• Fields:
  o American Literature;
  o Aspects of Theory;
  o Canadian Literature;
  o Medieval Literature;
  o Renaissance Literature;
  o Restoration and Eighteenth-Century Literature;
  o Romantic and Victorian Literature;
  o Twentieth and Twenty-First Century British and Irish Literature;
  o World Literatures in English

Combined Degree Programs

• STG, Law, JD / English, MA

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Book History and Print Culture
  o English, MA, PhD
• Diaspora and Transnational Studies
  o English, MA, PhD
• Jewish Studies
  o English, MA, PhD

• Sexual Diversity Studies
  o English, MA, PhD
• South Asian Studies
  o English, MA, PhD
• Women and Gender Studies
  o English, MA, PhD
• Women’s Health
  o English, MA, PhD

Overview

One of the strongest and most diverse graduate English programs in North America, the University of Toronto's graduate program in the Department of English presents a wide array of approaches to the study of literature that includes both rigorous historical scholarship and the innovations of new theoretical, cultural, and interdisciplinary methods. This rich variety is exemplified in the more than 40 graduate seminars offered every year and in the interdisciplinary conjunctions with other departments and collaborative specializations.

Contact and Address

Web: www.english.utoronto.ca
Email: deptofenglish.graduate@utoronto.ca
Telephone: (416) 978-2526
Fax: (416) 978-2836

Department of English
University of Toronto
Jackman Humanities Building
6th Floor, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

English: Graduate Faculty

Full Members

Ackerman, Alan - BA, MA, PhD
Akbari, Suzanne - BA, MA, MPH, PhD
Bewell, Alan - BA, MA, PhD
Blake, Liza - BA, MPH, MA, PhD
Bolus-Reichert, Christine - BPhil, AM, PhD
Boyagoda, Randy - PhD
Charise, Professor A. - BSc, MA, PhD
Clarke, George Elliott - BA, MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Cruz, Denise - BA, MA, PhD
Dickie, Simon - BA, MA, PhD
Dolan, Neal - BA, PhD
Downes, Paul - BA, PhD (Interim Director of Graduate Studies)
Dubois, Andrew - BA, PhD
Esonwanne, Uzoma - BA, MA, PhD
Esterhammer, Angela - BA, PhD
Gaston, Kara Susan - BA, MPH, PhD
Gillespie, Alexandra - BA, BSc, PhD
Goldman, Marlene Beth - BFA, MA, PhD
Greene, Richard - PhD
English: English MA

Master of Arts

Program Description

The Master of Arts program offers broad coverage in British, Canadian, Aboriginal, American, and postcolonial literatures, a sophisticated command of current theoretical approaches, and exceptional preparation and intellectual support for significant research.

The MA in English degree program is offered in 10 fields: 9 fields have the same requirements, while the field of Creative Writing has different requirements.

The MA program can be taken on a full-time or part-time basis except in the Creative Writing field, which is taken on a full-time basis only. Requirements for the Creative Writing field are described in a separate section below.
Fields:
1) American Literature; 2) Aspects of Theory; 3) Canadian Literature; 4) Medieval Literature; 5) Renaissance Literature; 6) Restoration and Eighteenth-Century Literature; 7) Romantic and Victorian Literature; 8) Twentieth and Twenty-First Century British and Irish Literature; 9) World Literatures in English

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of English's additional admission requirements stated below.
- A minimum of 7 full-year undergraduate courses in English or the equivalent in half-year courses (i.e., 14), or any combination of full- and half-year courses that add up to the equivalent of 7 full-year courses.
- An appropriate bachelor's degree (i.e., a four-year undergraduate degree), or its equivalent (preferably in English), with a minimum grade point average (GPA) of B+ or better and evidence of first-class work in English. The department favours a broad training in the major genres and all periods of English literary history.
- Recommendations from two referees.
- A statement of purpose.
- A writing sample consisting of 12 to 15 pages. The writing sample should be an accomplished piece of the applicant's own academic writing, such as an advanced undergraduate seminar paper. See details about the writing sample.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English are required to write the Test of English as a Foreign Language (TOEFL). Minimum scores required are:
  - 600 on the paper-based test and 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test, with at least 22/30 on the writing and speaking sections.
- Admissions are selective; possession of minimum qualifications does not guarantee admission.

Program Requirements

- **Coursework.** Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - ENG6999Y Critical Topographies: Theory and Practice of Contemporary Literary Studies in English (1.0 FCE)
  - 3.0 approved graduate FCEs in English.
- Students must attain a B standing in each graduate course.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 9 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Field: Creative Writing

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of English's additional admission requirements stated below.
- A minimum of 7 full-year undergraduate courses in English or the equivalent in half-year courses (i.e., 14), or any combination of full- and half-year courses that add up to the equivalent of 7 full-year courses.
- An appropriate bachelor's degree (i.e., a four-year undergraduate degree), or its equivalent (preferably in English), with a minimum grade point average (GPA) of B+ or better and evidence of first-class work in English. The department favours a broad training in the major genres and all periods of English literary history.
- Recommendations from two referees.
- A statement of purpose.
- A writing sample consisting of 12 to 15 pages. The writing sample should be an accomplished piece of the applicant's own academic writing, such as an advanced undergraduate seminar paper. See details about the writing sample.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English are required to write the Test of English as a Foreign Language (TOEFL). Minimum scores required are:
  - 600 on the paper-based test and 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test, with at least 22/30 on the writing and speaking sections.
- Admissions are selective; possession of minimum qualifications does not guarantee admission.

Program Requirements

- **Coursework.** Students must successfully complete a total of 3.0 full-course equivalents (FCEs) as follows:
  - ENG6950Y Workshop in Creative Writing (1.0 FCE). All students must complete the Workshop in Creative Writing in Year 1 of their program.
  - 2.0 approved FCEs in English.
- Students must attain a B standing in each graduate course.
- Supervised **Writing Project** (the equivalent of a thesis). Upon completion of coursework, students undertake a book-length Writing Project in a genre of their choice: poetry, drama, fiction, or creative non-fiction. Each student is assigned a faculty member or adjunct faculty member with whom to consult on a regular basis about the project. All advisors are published writers.
The MA Creative Writing program cannot be taken on a part-time basis.

Program Length
5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit
3 years full-time

English: English PhD
Doctor of Philosophy
Program Description
The Doctor of Philosophy program offers broad coverage in British, Canadian, Aboriginal, American, and postcolonial literatures, a sophisticated command of current theoretical approaches, and exceptional support for significant research projects.

Applicants are admitted through one of two routes: 1) a master's degree in English, 2) in exceptional cases, an appropriate bachelor's degree (direct entry).

Completion of the PhD program may take longer than the indicated program length below.

Fields:
1) American Literature; 2) Aspects of Theory; 3) Canadian Literature; 4) Medieval Literature; 5) Renaissance Literature; 6) Restoration and Eighteenth-Century Literature; 7) Romantic and Victorian Literature; 8) Twentieth and Twenty-First Century British and Irish Literature; 9) World Literatures in English

PhD Program
Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of English's additional admission requirements stated below.
- Normally, applicants have a master's degree in English from a recognized university, with an average grade equivalent to at least a University of Toronto A– in the applicant's overall program.
- Applicants must satisfy the department that they are capable of independent research in English at an advanced level.
- Recommendations from two referees.
- A writing sample of not more than 5,000 words (approximately 15 to 20 pages).
- A statement of purpose.
- A curriculum vitae (CV).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English are required to write the Test of English as a Foreign Language (TOEFL). Minimum scores required are:
  - 600 on the paper-based test and 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test, with at least 22/30 on the writing and speaking sections.
- Admission to the PhD is based on the applicant's undergraduate and graduate records and upon the evidence of the references and statement.
- Admissions are selective; possession of minimum qualifications does not guarantee admission.

Program Requirements

- Students pursue a program of study and research approved by the department.

Courses

- The minimum course requirements for the degree are as follows.
  - ENG8000H Texts, Theories, and Archives (0.5 FCE) unless this or an equivalent course has already been taken
  - ENG9500H Professional Development (0.5 FCE)
  - ENG9900H Professing Literature (0.5 FCE)
  - 3.0 additional FCEs in English, as approved by the department.
- Every student must select at least 2.0 FCEs outside the chosen field of study in the course of their graduate training. The student is encouraged to combine these courses into a minor field. Graduate courses taken as part of the master's program and in fulfillment of the English language requirement may be counted in this connection, but not ENG36999Y Critical Topographies: Theory and Practice of Contemporary Literary Studies in English nor courses in the 9000 series.
- Course selection must meet the approval of the department.

English-Language Requirement

- Demonstrated knowledge of the history and development of the English language, especially of its early period.
- Any student who has not completed ENG240Y or an equivalent full-year undergraduate course in Old English with at least a B standing is required to take one of the following courses in the English language:
  - ENG1001H Old English I
  - ENG6361H History and Structure of the English Language I
  - ENG6362H History and Structure of the English Language: Post-1500
Thesis

- ENG6365H Diasporic Englisches.
- Alternatively, the requirement can be satisfied by taking a special examination in Old English.

Language Requirement

- Demonstrated reading knowledge of French by May 31 of Year 3 of registration.
- With the permission of the department, another language (other than English) may be substituted for French provided that this other language is required by the student's research area.
- The supervisory committee may require the student to qualify in other program-related languages as well.

Special Fields Examination

- Students are required to pass a Special Fields Examination. The examination has three components:
  - a written examination, based on a reading list drawn up in consultation with the supervisory committee;
  - a short position paper, in which the student articulates the argument and stakes of the proposed thesis in light of the preparation for this written examination;
  - an oral examination that engages in part with the written examination and in part with the position paper.
- Students who enter the PhD program with a master's degree generally take the Special Fields Examination no later than the end of the second session of Year 2. A second attempt of the Special Fields Examination is allowed on the recommendation of the student's committee.
- The student must have completed all requirements for the degree, exclusive of thesis research, by the end of Year 3 in order to remain in good standing in the program.

Thesis

- A candidate is required to submit a thesis on an approved subject embodying the results of original investigation which constitute a significant contribution to the knowledge of the field, and to pass an oral examination on the subject of the thesis. The normal length of a PhD thesis is approximately 75,000 words. The maximum length accepted by the department is 100,000 words.
- No later than May 15 of Year 1 of registration, the student must submit to the Associate Director, PhD, a preliminary thesis proposal, approved by the prospective supervisor. The Associate Director, PhD, appoints a supervisory committee that includes a supervisor and two other faculty members with expertise in the proposed research area. The student is required to meet with the supervisory committee within three months of submitting the preliminary proposal. An approved thesis proposal signed by all members of the supervisory committee and by the Associate Director, PhD, must be submitted by October 1 of Year 2 of registration.
- The student and the supervisor should meet regularly. The student is also required to meet at least once a year with the supervisory committee. The supervisory committee should normally approve the completed thesis before it is submitted for examination.
- The Doctoral Final Oral Examination is arranged by the department in collaboration with the School of Graduate Studies. The candidate should allow at least 10 weeks from submission of the thesis for the department to complete the arrangements for the oral examination.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of English's additional admission requirements stated below.
- In exceptional cases, applicants with an appropriate bachelor's degree from a recognized university that includes at least 8.0 full-course equivalents (FCEs) in English, with an average grade equivalent to at least a University of Toronto A– in the applicant's overall program may be considered for admission (direct entry).
- Applicants must satisfy the department that they are capable of independent research in English at an advanced level.
- Recommendations from two referees.
- A writing sample of not more than 5,000 words (approximately 15 to 20 pages).
- A statement of purpose.
- A curriculum vitae (CV).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English are required to write the Test of English as a Foreign Language (TOEFL). Minimum scores required are:
  - 600 on the paper-based test and 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test, with at least 22/30 on the writing and speaking sections.
- Admission to the PhD is based on the applicant's undergraduate records and upon the evidence of the references and statement.
- Admissions are selective; possession of minimum qualifications does not guarantee admission.

Program Requirements

- Students pursue a program of study and research approved by the department.

Courses

- The minimum course requirements for the degree are as follows. Students admitted directly from a bachelor's degree must take a total of 7.5 full-course equivalents (FCEs) as follows:
Special Fields Examination

- Students are required to pass a Special Fields Examination. The examination has three components:
  - a written examination, based on a reading list drawn up in consultation with the supervisory committee;
  - a short position paper, in which the student articulates the argument and stakes of the proposed thesis in light of the preparation for this written examination;
  - an oral examination that engages in part with the written examination and in part with the position paper.
- Direct-entry students generally take the Special Fields Examination no later than the end of the second session of Year 3. A second attempt of the Special Fields Examination is allowed on the recommendation of the student’s committee.
- The student must have completed all requirements for the degree, exclusive of thesis research, by the end of Year 4 in order to remain in good standing in the program.

Thesis

- A candidate is required to submit a thesis on an approved subject embodying the results of original investigation which constitute a significant contribution to the knowledge of the field, and to pass an oral examination on the subject of the thesis. The normal length of a PhD thesis is approximately 75,000 words. The maximum length accepted by the department is 100,000 words.
- No later than May 15 of Year 2 of registration, the student must submit to the Associate Director, PhD, a preliminary thesis proposal, approved by the prospective supervisor. The Associate Director, PhD, appoints a supervisory committee that includes a supervisor and two other faculty members with expertise in the proposed research area. The student is required to meet with the supervisory committee within three months of submitting the preliminary proposal. An approved thesis proposal signed by all members of the supervisory committee and by the Associate Director, PhD, must be submitted by October 1 of Year 3 of registration.
- The student and the supervisor should meet regularly. The student is also required to meet at least once a year with the supervisory committee. The supervisory committee should normally approve the completed thesis before it is submitted for examination.
- The Doctoral Final Oral Examination is arranged by the department in collaboration with the School of Graduate Studies. The candidate should allow at least 10 weeks from submission of the thesis for the department to complete the arrangements for the oral examination.

Program Length

5 years

Time Limit

7 years

English: English MA, PhD Courses

The following list of possible courses is subject to revision; further information, including course descriptions and timetables, are posted on the Department of English website and may be obtained from the department before enrolment. Courses offered by the department vary considerably from year to year. Students in English are eligible to take courses in other graduate units (for example, Comparative Literature, Medieval Studies, Drama, Information, South Asian Studies, Women's Studies). From time to time, the department also offers programs of directed reading in special fields. These reading courses are normally available only to students in the PhD program. With the special approval of the Director of Graduate Studies, PhD students may substitute...
one such course for one (and not more than one) of the required courses.

<table>
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<tr>
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<td>ENG1001H</td>
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<td>ENG1002H</td>
<td>Introduction to Old English II: Beowulf</td>
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<td>ENG1007H</td>
<td>Medieval Drama: Morality Plays</td>
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<td>ENG1009H</td>
<td>Writing the Nation: Pre-modern Historiographies</td>
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<td>ENG1011H</td>
<td>Economies of Medieval Drama: East Anglia, Kent, Sussex</td>
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<td>ENG1025H</td>
<td>Globalization and the Religious Other in Medieval Literature</td>
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<td>Constructions of the Other in Medieval Literature</td>
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<td>Chaucer's Troilus and Criseyde and Other Works</td>
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<td>ENG1730H</td>
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<td>The Queer Renaissance: Queer Studies, Early Modern Texts</td>
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<td>A Royal Society of Their Own: Early Modern Lit/Sci/Phil</td>
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<td>Early Modern Psyches: Shakespeare and Psychoanalysis</td>
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<td>John Donne's Poetic Inhabitations</td>
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<td>John Donne: Theory and Context</td>
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<td>The Renaissance of Art</td>
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<td>Character in 19th-Century Fiction</td>
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<td>ENG5020H</td>
<td>#BlackLivesMatter: Contemporary Black Canadian Literature</td>
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<td>Woolf/Beckett/Coetzee</td>
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<td>ENG5253H</td>
<td>Simply Divine! The Novels of Evelyn Waugh and Graham Greene</td>
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<td>E. M. Forster and His Legacies</td>
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<td>ENG5283H</td>
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<td>ENG5288H</td>
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<td>ENG5300H</td>
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<td>ENG5555H</td>
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</table>
Environment

Environment: Introduction

The new Master of Environment and Sustainability (MES) program will start in September 2022.

Faculty Affiliation

Arts and Science

Degree Programs

Environment and Sustainability

MES

- Concentrations:
  - Adaptation and Resilience;
  - Global Change Science;
  - Social Sustainability;
  - The Sustainability Transition

Overview

The goal at the School of the Environment is to create and interpret knowledge on environmental issues through outstanding academic programs, and to provide students with the skills, knowledge, and experience necessary to make a substantive difference in the world. We are focused on creating new knowledge, training future leaders, engaging and forging partnerships with the wider community, and contributing to positive environmental and social change from the local to the global scale.

The School of the Environment acts as a hub for researchers and students from many different disciplines spanning the social sciences, natural sciences, and humanities, bringing together many different perspectives to bear on today’s pressing environmental challenges. Faculty and instructors make up a diverse community collaborating across departments, schools, and Faculties at the University of Toronto and beyond.

Contact and Address

Web: environment.utoronto.ca/graduate/mes
Email: grad.office.env@utoronto.ca
Telephone: (416) 978-3475

School of the Environment
University of Toronto
33 Willcocks Street, Suite 1016V
Toronto, Ontario, M5S 3E8
Canada

Environment: Graduate Faculty

Full Members

Abizaid, Christian - MA, PhD
Ackerman, Alan - BA, MA, PhD
Ahmed, Ishtiaque - PhD
Allen, Grant - BASc, MSc, PhD
Andrews, Robert - BASc, MSc, PhD, PEng
Archontitis, Georgios - BSc, MSc, PhD
Barrett, Spencer - BSc, PhD
Becker, Christoph - BSc, MSc, DSc
Bernstein, Steven - PhD
Boland, Alana - BA, MA, PhD
Brown, Laura - BSc, MSc, PhD
Bunce, Susannah - BA, MES, PhD
Chan, Arthur - BS, MSc, PhD
Chen, Jing - BSc, PhD
Cole, Donald - MSc, MD
Coleman, Simon - BA, PhD
Conway, Tenley - BS, MS, PhD
Corey, Paul - BSc, MA, PhD
Corts, Kenneth - BA, MA, PhD
Cowling, Sharon - BSc, MSc, PhD
Cunningham, Hilary - BA, MA, PhD
Daniere, Amrita - AB, PhD
Del, George J.S. - BA, MA, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria - BES, MSc, PhD
Donmez Akylidiz, Birsen - BS, MS, PhD
Drake, Jennifer Anne Pauline - BEng, MSc, PhD, PEng
Easterbrook, Steve - BSc, PhD (Director)
Edwards, Elizabeth - BEng, PhD
Engstrom, Mark - BSc, MSc, PhD
Ensminger, Ingo - PhD
Evans, Greg - PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gough, William - BSc, MSc, PhD
Green, Jessica - PhD, PhD
Gross, Mart - BSc, PhD
Harvey, Danny - BSc, MSc, PhD
Hatzopoulos, Marianne - BSc, BSc, MSc, MSc, PhD, PhD
Hirsh, Jacob - BSc, MA, PhD
Hoffmann, Matthew - BSc, PhD
Howard, Ken - BSc, MSc, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
Jackson, Donald - BSc, MSc, PhD
Jakubiec, Alstan - BArch, MArch, DPhil
Jia, Charles - BEng, MEng, PhD
Jones, Dylan - AB, SM, PhD
Kant, Shashi - BE, MA, PhD
Karney, Bryan - BSc, MEng, PhD, PEng
Kepe, Thembiela - MS, PhD
Kesik, Ted - BASc, MASC, DPhil
Klenk, Nicole - BS, MSc, PhD
Kotanen, Peter - BSc, MSc, PhD
Krokek, Marty - BSc, PhD
Kushner, Paul - BSc, MSc, PhD
Leos Barajas, Vianey - BSc, PhD
Mabury, Scott - BS, PhD
Maclaren, Virginia - BA, MRP, MSc, PhD
MacLean, Heather L - BASc, MASC, MBA, PhD, PEng
Mahrt-Smith, Jan - BSc, PhD
Malcolm, Jay - BSc, MSc, PhD
Margolis, Liat - BFA, MLA
McCarney, Patricia - BA, MCP, PhD
McCauley, Shannon - PhD
Environment: Environment and Sustainability MES

Master of Environment and Sustainability

Program Description

The Master of Environment and Sustainability (MES) is a full-time, one-year program designed for students seeking the transdisciplinary research skills needed to understand and develop solutions to the many environmental and human well-being challenges and opportunities facing us in the 21st century. The transdisciplinary perspective means research 1) that is problem-focused, rather than discipline-focused, starting from problems in the world and working back to the knowledge required to address those problems; and 2) involves active engagement with non-academic partners in active processes of co-production of knowledge.

The program builds on the strengths of the School of Environment's undergraduate programs and its two interdisciplinary graduate collaborative specializations in Environmental Studies and Environment and Health. Upon graduation, MES students will have acquired a transdisciplinary perspective on environmental issues, learned to use methodologies and tools relevant to environmental protection and sustainability solutions, and will be well prepared for a variety of careers in the private and public sectors or for further studies at the doctoral level.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the School of the Environment's additional admission requirements stated below.
- An appropriate honours bachelor's degree (HBSc or HBA) that includes at least a minor in environment, sustainability, or a closely related field from a recognized university with a minimum standing equivalent to at least a University of Toronto B+ in each of the final two years of study.
- Applicants should have completed a combination of major(s) and minor(s) spanning more than one discipline or have equivalent interdisciplinary experience.

- A letter of intent.
- Two letters of reference.
Program Requirements

- **Coursework.** Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows. Students will undertake research leading to the preparation of a thesis.
  - 1.5 FCEs in core courses:
    - ENV1103H *Living Labs for Applied Sustainability*
    - ENV1197H *Research in Environment and Sustainability, Part 1* (pending approval)
    - ENV1198H *Research in Environment and Sustainability, Part 2* (pending approval)
  - 1.0 FCE thesis: ENV1199Y (pending approval)
  - 1.5 FCEs in electives chosen from the list below, from one of four concentrations.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Environment: Environment and Sustainability MES Courses

Core Courses

2.5 full-course equivalents (FCEs):

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<td>ENV1199Y</td>
<td>Thesis (pending approval)</td>
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Elective Courses

1.5 FCEs chosen from one of the following concentrations:

**Concentration 1: Adaptation and Resilience**

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<td>CHL5903H</td>
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<td>CHL5911H</td>
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<td>CSC2720H</td>
<td>Systems Thinking for Global Problems</td>
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<td>EES1136H</td>
<td>Climate Change Adaptation</td>
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**Concentration 2: Global Change Science**

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<tbody>
<tr>
<td>ANT4065H</td>
<td>Specific Problems: New World</td>
</tr>
<tr>
<td>CHE1435H</td>
<td>Fundamentals of Aerosol Physics and Chemistry</td>
</tr>
<tr>
<td>CHM1401H</td>
<td>Transport and Fate of Chemical Species in the Environment</td>
</tr>
<tr>
<td>CHM1410H</td>
<td>Analytical Environmental Chemistry</td>
</tr>
<tr>
<td>CHM1420H</td>
<td>Environmental Chemistry of Soil</td>
</tr>
<tr>
<td>CHM1425H</td>
<td>Modelling the Fate of Organic Chemicals in The Environment</td>
</tr>
<tr>
<td>ENV1001H</td>
<td>Environmental Decision Making</td>
</tr>
<tr>
<td>ESS1461H</td>
<td>Paleoenvironmental Studies</td>
</tr>
<tr>
<td>ESS2303H</td>
<td>Earth Systems Evolution</td>
</tr>
<tr>
<td>FOR3000H</td>
<td>Current Issues in Forest Conservation</td>
</tr>
<tr>
<td>PHY1498H</td>
<td>Introduction to Atmospheric Physics</td>
</tr>
<tr>
<td>PHY2502H</td>
<td>Climate System Dynamics</td>
</tr>
<tr>
<td>PHY2504H</td>
<td>Advanced Atmospheric Dynamics</td>
</tr>
<tr>
<td>PHY2505H</td>
<td>Atmospheric Radiative Transfer and Remote Sounding</td>
</tr>
<tr>
<td>PHY2506H</td>
<td>Data Assimilation and Retrieval Theory</td>
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Concentration 3: Social Sustainability

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ANT3034H</td>
<td>Advanced Research Seminar IV</td>
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<tr>
<td>ANT6018H</td>
<td>Approaches to Nature and Culture</td>
</tr>
<tr>
<td>DRA3903H</td>
<td>Topics in Theatre, Drama, and Performance</td>
</tr>
<tr>
<td>ENV1001H</td>
<td>Environmental Decision Making</td>
</tr>
<tr>
<td>ENV1008H</td>
<td>Worldviews and Ecology</td>
</tr>
<tr>
<td>ENV1444H</td>
<td>Capitalist Nature</td>
</tr>
<tr>
<td>ENV1701H</td>
<td>Environmental Law</td>
</tr>
<tr>
<td>ENV4001H</td>
<td>Graduate Seminar in Environment and Health</td>
</tr>
<tr>
<td>ENV4002H</td>
<td>The Environment and Health of Vulnerable Populations (pending approval)</td>
</tr>
<tr>
<td>JGE1425H</td>
<td>Livelihoods, Poverty, and Environment in the Developing Countries</td>
</tr>
<tr>
<td>JPG1426H</td>
<td>Natural Resources, Difference, and Conflict</td>
</tr>
<tr>
<td>JPG1518H</td>
<td>Sustainability and Urban Communities</td>
</tr>
<tr>
<td>JPG1672H</td>
<td>Land and Justice</td>
</tr>
<tr>
<td>LHA1104H</td>
<td>Social Action Education — Community Development, Social Services, and Social Movements</td>
</tr>
<tr>
<td>LHA1160H</td>
<td>Introduction to Transformative Learning Studies</td>
</tr>
<tr>
<td>LHA1193H</td>
<td>Adult Education for Sustainability</td>
</tr>
<tr>
<td>LHA1837H</td>
<td>Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing</td>
</tr>
<tr>
<td>POL2173H</td>
<td>Environmental Politics in Canada</td>
</tr>
<tr>
<td>POL2213H</td>
<td>Global Environmental Politics</td>
</tr>
<tr>
<td>SJE1909H</td>
<td>Environmental Sustainability and Social Justice I</td>
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<tr>
<td>FOR1294H</td>
<td>Bioenergy and Biorefinery Technology</td>
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<tr>
<td>GGR1407H</td>
<td>Efficient Use of Energy (exclusion: GGR347H1)</td>
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<tr>
<td>GGR1408H</td>
<td>Carbon-Free Energy (exclusions: GGR1406H, GGR348H1)</td>
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<tr>
<td>JPG1610H</td>
<td>Sustainable Forest Management and Certification</td>
</tr>
<tr>
<td>JPG1518H</td>
<td>Sustainability and Urban Communities</td>
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</table>

Concentration 4: The Sustainability Transition

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CIV1307H</td>
<td>Life Cycle Assessment and Sustainability of Engineering Activities</td>
</tr>
<tr>
<td>ENV1001H</td>
<td>Environmental Decision Making</td>
</tr>
<tr>
<td>ENV1002H</td>
<td>Environmental Policy</td>
</tr>
<tr>
<td>ENV1003H</td>
<td>Global Climate Politics and Policy (pending approval)</td>
</tr>
<tr>
<td>ENV1444H</td>
<td>Capitalist Nature</td>
</tr>
<tr>
<td>ENV1707H</td>
<td>Environmental Finance and Sustainable Investing</td>
</tr>
<tr>
<td>FOR1270H</td>
<td>Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier</td>
</tr>
<tr>
<td>FOR1288H</td>
<td>Design and Manufacturing of Biomaterials</td>
</tr>
</tbody>
</table>
European, Russian, and Eurasian Studies

European, Russian, and Eurasian Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

European and Russian Affairs

MA

Combined Degree Programs

- STG, Law, JD / European and Russian Affairs, MA

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Ethnic, Immigration and Pluralism Studies
  - European and Russian Affairs, MA
- Jewish Studies
  - European and Russian Affairs, MA

Overview

The Master of Arts program in European and Russian Affairs (MA ERA) is designed to provide a well-rounded education in European, Russian, and Eurasian affairs for students who wish to pursue professional, non-academic careers in areas such as government and diplomacy, journalism, business, and teaching. The programs also enrich and broaden the base of knowledge of beginning graduate students considering any PhD-level study with a specialization in the European and Russian areas.

The Combined Degree Program in Law, Juris Doctor / European and Russian Affairs, Master of Arts provides specialized professional training for those seeking a career in law in the changing environment of the post-communist world and the European Union. There is a need for the services of well-informed specialists who can navigate the legal pitfalls of emergent legal systems and deal with lawyers and government officials in the area. Best equipped to meet this demand are people with dual expertise in law and European and Russian studies.

Contact and Address

Web: munkschool.utoronto.ca/ceres
Email: katia.malyuzhinets@utoronto.ca
Telephone: (416) 946-8962
Fax: (416) 946-8939

Centre for European, Russian, and Eurasian Studies
Munk School of Global Affairs & Public Policy
University of Toronto
Room 127N, 1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

European, Russian, and Eurasian Studies: Graduate Faculty

Full Members

Austin, Robert - BA, MA, PhD (Graduate Coordinator)
Bergen, Doris - MA, PhD
Braun, Aurel - BA, MA, PhD
Fenner, Angelica - BA, MA, PhD
Goetschel, Willi - PhD
Hansen, Randall - BA, MPH, PhD, CRC (Director)
Knop, Karen - BSc, LLB, LLM, SJD
Koznarsky, Taras - MA, PhD
Kramer, Christina - BA, MA, PhD
Lahusen, Thomas - MA, PhD
Levi, Ron - BCL, LLB, LLM, SJD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Noyes, John - BA, MA, PhD
Ormston, Darius - BA, MA, PhD
Orwin, Donna - PhD
Ostapchuk, Victor - BA, PhD
Pruessen, Ronald - BA, MA, PhD
Retallack, James - BA, DPhil
Smith, Alison - AM, PhD
Soldovieri, Stefan - BA, MA, PhD
Stock, Markus - MA, PhD
Subtelny, Maria - BA, PhD
Tarnawsky, Maxim - BA, PhD
Triadafilopoulos, Triadafilos - BA, MA, PhD
Trojanowska, Tamara - MA, PhD
Viola, Lynne - BA, MA, PhD
Wittmann, Rebecca - AB, MA, PhD
Wrobel, Piotr Jan - MA, PhD
Zilcosky, John - BA, MA, MA, PhD

Members Emeriti

Johnson, Robert - BA, PhD
Perron, Paul - PhD
Solomon, Peter - BA, MA, PhD
Solomon, Susan - BA, MA, PhD

Associate Members

Acorn, Elizabeth - BA, MA, PhD, JD
Burchell, Kenzie - BA, MSA, PhD
European, Russian, and Eurasian Studies: European, Russian, and Eurasian Studies MA

Master of Arts

Program Description

The Master of Arts program in European and Russian Affairs (MA ERA) is designed to provide a well-rounded education in European, Russian, and Eurasian affairs for students who wish to pursue professional, non-academic careers in areas such as government and diplomacy, journalism, business, and teaching. The programs also enrich and broaden the base of knowledge of graduate students considering any PhD-level study with a specialization in the European and Russian areas.

The MA in European and Russian Affairs offers students:

- the opportunity to study at the leading research university in Canada;
- the chance to work with outstanding faculty in a wide range of disciplines with a research specialization on Europe, Russia, and Eurasia;
- internships, exchanges, summer study programs, and research experience in the region;
- access to one of North America's largest research libraries;
- participation in the rich academic programs of the Centre for European, Russian, and Eurasian Studies and the Munk School of Global Affairs and Public Policy including specialized graduate workshops and courses offered by visiting professors;
- a strong and vibrant learning community with individualized academic and financial support;
- leadership roles in graduate student conferences, blogs, and journals.

The program requires a minimum of two academic years of full-time graduate study. For further information about graduate programs and study grants, please contact the Graduate Coordinator.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for European, Russian, and Eurasian Studies additional admission requirements stated below.
- At least some of the work in the program is based on the study of original texts and presupposes a reading knowledge of a language relevant to the program. Preferably, applicants should have a minimum of one academic year of study in a relevant language and are urged to undertake additional language training in the summer preceding entry to the program.

Program Requirements

- **Coursework.** Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 2.0 FCEs in the chosen primary discipline; for example, History or Political Science.
  - 2.0 FCEs must be drawn from any discipline(s) relating to the student's course of study other than the chosen primary discipline. Students can take courses in any department, with the approval of the instructor and Graduate Coordinator, provided that the student submits coursework related to the region.
  - ERE2001H (0.5 FCE), taken in Year 1 of the program.
  - ERE2000Y (1.0 FCE), the interdisciplinary core course, beginning in the second session of Year 1 and continuing into Year 2. As part of ERE2000Y, each student must write 10,000 to 12,000 words including references, based on original research.
  - At least 0.5 FCE must be earned either in an approved program-related internship or in an approved academic exchange abroad.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

European, Russian, and Eurasian Studies: European, Russian, and Eurasian Studies MA Courses

Not all courses are offered every year. Consult the Centre for European, Russian, and Eurasian Studies and individual departments for course availability. Consult the Graduate Coordinator for course credit eligibility.

Required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ERE2000Y</td>
<td>Research Seminar</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ERE2001H</td>
<td>Gateway Proseminar in European, Russian, and Eurasian Studies</td>
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<tr>
<td>CRI3220H</td>
<td>Organized Crime and Corruption</td>
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**Elective**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ERE1151H</td>
<td>European Studies</td>
</tr>
<tr>
<td>ERE1161H</td>
<td>Topics in Russian and Eurasian Studies</td>
</tr>
<tr>
<td>ERE1162H</td>
<td>Topics in the Caucasus</td>
</tr>
<tr>
<td>ERE1165H</td>
<td>International Internship (Credit/No Credit)</td>
</tr>
<tr>
<td>ERE1170H</td>
<td>Conflicts and Para-States in the European Union’s Backyard</td>
</tr>
<tr>
<td>ERE1175H</td>
<td>One Hundred Years of Cultures of Refugees in Europe, 1920–2020</td>
</tr>
<tr>
<td>ERE1179H</td>
<td>Illiberalism in East-Central Europe</td>
</tr>
<tr>
<td>ERE1186H</td>
<td>The Past As Prologue: East Central and Southeastern Europe in the Interwar Period</td>
</tr>
<tr>
<td>ERE1195H</td>
<td>Topics in Ukraine and Eastern Europe</td>
</tr>
<tr>
<td>ERE1197H</td>
<td>Reading Course</td>
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**Anthropology**

For a full listing of courses, see the Anthropology entry in this calendar.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ANT6021H</td>
<td>Political Anthropology: State, Power, and Sovereignty</td>
</tr>
<tr>
<td>JSA5147H</td>
<td>Language, Nationalism, and Post-Nationalism</td>
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</tbody>
</table>

**Comparative Literature**

For a full listing of courses, see the Comparative Literature entry in this calendar.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>COL5037H</td>
<td>Magic Prague: Questions of Literary Cityspaces</td>
</tr>
<tr>
<td>COL5047H</td>
<td>The Two Avant-Gardes</td>
</tr>
<tr>
<td>JGC1855H</td>
<td>Critical Theory in Context: The German-French Connection</td>
</tr>
<tr>
<td>JHL1282H</td>
<td>Comparative Totalitarian Culture</td>
</tr>
<tr>
<td>JLV5134H</td>
<td>Theories of the Novel</td>
</tr>
</tbody>
</table>

**Criminology and Sociolegal Studies**

For a full listing of courses, see the Criminology and Sociolegal Studies entry in this calendar.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CRI3130H</td>
<td>Policing</td>
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</table>

**Germanic Languages and Literatures**

For a full listing of courses, see the Germanic Languages and Literatures entry in this calendar.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GER1722H</td>
<td>Kafka</td>
</tr>
<tr>
<td>GER1780H</td>
<td>Topics in German Visual Culture</td>
</tr>
<tr>
<td>GER6000H</td>
<td>Reading German for Graduate Students</td>
</tr>
<tr>
<td>JGC1855H</td>
<td>Critical Theory in Context: The French-German Connection</td>
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</tbody>
</table>

**History**

For a full listing of courses, see the History entry in this calendar.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIS1032H</td>
<td>Modernity and Its Visual Cultures</td>
</tr>
<tr>
<td>HIS1200H</td>
<td>Readings in European Intellectual History</td>
</tr>
<tr>
<td>HIS1237H</td>
<td>France: 1870–1968</td>
</tr>
<tr>
<td>HIS1268H</td>
<td>The Holocaust and World War II</td>
</tr>
<tr>
<td>HIS1272H</td>
<td>Topics in Twentieth-Century European History</td>
</tr>
<tr>
<td>HIS1275H</td>
<td>Imperial Germany, 1871–1918</td>
</tr>
<tr>
<td>HIS1281H</td>
<td>History of Real Socialism</td>
</tr>
<tr>
<td>HIS1287H</td>
<td>Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)</td>
</tr>
<tr>
<td>HIS1290H</td>
<td>Topics in Imperial Russian History</td>
</tr>
<tr>
<td>HIS1293Y</td>
<td>Kievan Rus’ (joint graduate/undergraduate)</td>
</tr>
<tr>
<td>HIS1296H</td>
<td>Stalinism and After: Beyond Cold War History</td>
</tr>
<tr>
<td>HIS1805H</td>
<td>Human Rights and Empire (exclusion: HIS1860H)</td>
</tr>
<tr>
<td>JHL1282H</td>
<td>Comparative Totalitarian Culture</td>
</tr>
<tr>
<td>JHP1289Y</td>
<td>Twentieth-Century Ukraine (joint graduate/undergraduate)</td>
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</table>

**Near and Middle Eastern Civilizations**

For a full listing of courses, see the Near and Middle Eastern Civilizations entry in this calendar.

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>JNE2320H</td>
<td>Modern Turkey</td>
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**Political Science**

For a full listing of courses, see the Political Science entry in this calendar.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>JHP2351Y</td>
<td>The People From Nowhere</td>
</tr>
<tr>
<td>JRA2321H</td>
<td>Topics in Comparative Politics</td>
</tr>
<tr>
<td>JRA2337H</td>
<td>Government Law and Politics in Russia</td>
</tr>
<tr>
<td>POL2207H</td>
<td>Topics in International Politics III</td>
</tr>
<tr>
<td>POL2226H</td>
<td>Ethics and International Relations</td>
</tr>
<tr>
<td>POL2240H</td>
<td>Geopolitics of Cyberspace</td>
</tr>
<tr>
<td>POL2321H</td>
<td>Topics in Comparative Politics I</td>
</tr>
<tr>
<td>POL2326H</td>
<td>Democracy and Dictatorship</td>
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<tr>
<td>POL2335H</td>
<td>Business and Politics: Power in a Global World</td>
</tr>
<tr>
<td>SLA1225H</td>
<td>Russian Literature in the Age of Empire</td>
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<tr>
<td>SLA1226H</td>
<td>Dostoevsky in Literary Theory and Criticism</td>
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<tr>
<td>SLA1228H</td>
<td>Themes in Russian Realism</td>
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<tr>
<td>SLA1231H</td>
<td>Russian Modernism</td>
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<tr>
<td>SLA1238H</td>
<td>Chekhov</td>
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<tr>
<td>SLA1239H</td>
<td>Vladimir Nabokov</td>
</tr>
<tr>
<td>SLA1240H</td>
<td>Tolstoy</td>
</tr>
<tr>
<td>SLA1410H</td>
<td>Gogol</td>
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<tr>
<td>SLA1411H</td>
<td>Synthesis of Arts in the Late Russian Empire</td>
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<tr>
<td></td>
<td>Early Soviet Union</td>
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</table>

### Slavic Languages and Literatures
For a full listing of courses, see the Slavic Languages and Literatures entry in this calendar.

### Croatian and Serbian Literatures
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SLA1517H</td>
<td>Modern Serbian Bards</td>
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<tr>
<td>SLA1547H</td>
<td>South Slavic Folklore</td>
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</table>

### Czech and Slovak Literatures
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SLA1610H</td>
<td>V. Havel: Thinker, Politician, Writer</td>
</tr>
</tbody>
</table>

### Polish Literature
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SLA1304H</td>
<td>Transgressions: Drama, Theatre, Performance</td>
</tr>
<tr>
<td>SLA1308H</td>
<td>Critical Paradigms in Polish Culture</td>
</tr>
<tr>
<td>SLA1312Y</td>
<td>Modernism and Postmodernism in Polish Literature</td>
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</table>

### Russian Literature
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SLA1202H</td>
<td>Gulag Literature</td>
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<tr>
<td>SLA1203H</td>
<td>The Self and Other in Russian Prose</td>
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<tr>
<td>SLA1204H</td>
<td>Contemporary Russian Literature</td>
</tr>
<tr>
<td>SLA1207H</td>
<td>The Imaginary Jew</td>
</tr>
<tr>
<td>SLA1211Y</td>
<td>Studies in the Russian Drama: Eighteenth to</td>
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<td>Twentieth Century</td>
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<tr>
<td>SLA1215H</td>
<td>Studies in Russian Literature and Criticism in</td>
</tr>
<tr>
<td></td>
<td>the Eighteenth Century</td>
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<tr>
<td>SLA1216H</td>
<td>From English to Russian Literature and Back</td>
</tr>
<tr>
<td>SLA1218H</td>
<td>Pushkin</td>
</tr>
<tr>
<td>SLA1220H</td>
<td>Nineteenth Century Russian Thinkers</td>
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</table>

### Ukrainian Literature
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SLA1402Y</td>
<td>Studies in Ukrainian Modernism</td>
</tr>
<tr>
<td>SLA1403Y</td>
<td>Contemporary Ukrainian Literature</td>
</tr>
<tr>
<td>SLA1404Y</td>
<td>Studies in Ukrainian Poets</td>
</tr>
<tr>
<td>SLA1406Y</td>
<td>Studies in Ukrainian Literary Criticism</td>
</tr>
<tr>
<td>SLA1407H</td>
<td>Aspects of Literary Translation of Ukrainian</td>
</tr>
</tbody>
</table>

### General Slavic
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SLA1010H</td>
<td>Slavic Proseminar</td>
</tr>
<tr>
<td>SLA1039H</td>
<td>Kyiv-Kiev-Kijow: A City and the Text</td>
</tr>
<tr>
<td>SLA1320H</td>
<td>Postcommunism — Postcolonialism — Postdependence:</td>
</tr>
<tr>
<td></td>
<td>Central and Eastern European Perspectives</td>
</tr>
<tr>
<td>SLA1421H</td>
<td>Women in East European Fiction</td>
</tr>
<tr>
<td>SLA1521H</td>
<td>Post-Modernity and the Mythopoetic Legacy of</td>
</tr>
<tr>
<td></td>
<td>Mitteleuropa</td>
</tr>
</tbody>
</table>

### Reading and Research Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ERE1997H</td>
<td>Reading and Research</td>
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<tr>
<td>ERE1998H</td>
<td>Reading and Research I</td>
</tr>
<tr>
<td>ERE1999H</td>
<td>Reading and Research II</td>
</tr>
</tbody>
</table>
Financial Economics

Financial Economics: Introduction

Faculty Affiliation

Arts and Science; Management

Degree Programs

Financial Economics

Overview

The Master of Financial Economics (MFE) program is a non-thesis degree program offered jointly by the Department of Economics and the Rotman School of Management. The 18-month MFE program provides students with a broad understanding of financial theory as well as the economic framework upon which that theory is based, both in the classroom and through practical real-world experience. Students are expected to complete a mandatory winter or summer internship to enhance their development in the program and prepare themselves for an eventual career in industry. Graduates of the program receive a professional degree called the Master of Financial Economics.

Contact and Address

Web: mfe.economics.utoronto.ca
Email: mfe@utoronto.ca
Telephone: (416) 978-2678

Master of Financial Economics Program
Department of Economics, University of Toronto
150 St. George Street
Toronto, Ontario M5S 3G7
Canada

Financial Economics: Graduate Faculty

Economics

Aivazian, Varouj - BSc, MA, PhD
Cziraki, Peter - MA, MPH, MSc, PhD
Goldman, Jim - BSc, MSc, PhD
Hussain, Sayed - BA, PhD
Melino, Angelo - BA, PhD
Mondria, Jordi - BA, MA, PhD (Director)
Tian, Xu – BA, MA, PhD
Tsoy, Anton - PhD

Management

Davydenko, Sergei - MSc, MA, PhD
Dyck, Alexander – BA, PhD
McCurdy, Thomas - BA, MA, PhD
Stapleton, Maureen - MBA
Wang, Kevin - BSc, MA, PhD

Financial Economics: Financial Economics MFE

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the program's additional admission requirements stated below.
- An appropriate bachelor’s degree with at least a mid-B (75%) standing in the final year of the program.
- Successful completion of courses in calculus, intermediate microeconomics, intermediate macroeconomics, and statistics.
- Applicants who do not hold a degree from a Canadian university must submit an official Graduate Record Examination (GRE) General Test score or a Graduate Management Admission Test (GMAT) score. See the program’s website for details.
- Evidence of strong communication skills, both oral and written.
- Relevant work experience and/or previous training in finance is useful but not required.
- Admission is competitive, so accepted applicants will normally have achieved a standing considerably higher than the minimum requirements.

Program Requirements

- **Coursework.** Students must successfully complete a total of 6.5 full-course equivalents (FCEs) as follows:
  - 0.5 FCE in ECO1010H Mathematics and Statistics for MA and MFE Students (Credit/No Credit).
  - 2.0 FCEs from the Department of Economics. These core courses are the same as those required for the MA degree in Economics plus ECO1500H Financial Economics: Asset Pricing.
  - 1.5 FCEs from the Rotman School of Management: RSM2306H Options and Futures Markets, RSM2300H Corporate Financing, and RSM2302H Security Analysis and Portfolio Management.
  - 2.5 FCEs in electives from either the Department of Economics or the Rotman School, subject to the condition that at least 1.5 out of the 2.5 elective FCEs must be taken from the Department of Economics.
- Students must complete a one-session internship.
Program Length

5 sessions full-time (typical registration sequence: S/F/W/S/F)

Time Limit

3 years full-time
Forestry

Forestry: Introduction

Faculty Affiliation

Architecture, Landscape, and Design

Degree Programs

Forest Conservation

MFC

Forestry

MScF and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environmental Studies
  - Forest Conservation, MFC
  - Forestry, MScF, PhD
- Environment and Health
  - Forest Conservation, MFC
  - Forestry, MScF, PhD

Overview

The Graduate Department of Forestry is a unified group of interdisciplinary, diverse, dedicated, and innovative natural, engineering, and social scientists. Research areas include forest conservation science, forest ecosystem management, forest governance and policy, urban forestry, and biomass utilization for sustainable bio-based materials and chemical products.

The Graduate Department of Forestry provides unique, integrative, and applied education to future leaders in these fields. Its research drives the practices and decisions of current leaders who are tasked with successfully managing the competing demands placed on Ontario’s, Canada’s, and the world’s forests in the context of social and environmental change.

Contact and Address

Web: academic.daniels.utoronto.ca/forestry
Forest Conservation (MFC): graduate@daniels.utoronto.ca
Forestry (MScF, PhD): research@daniels.utoronto.ca
Telephone: (416) 946-3897

Graduate Department of Forestry
John H. Daniels Faculty of Architecture, Landscape, and Design
University of Toronto
1 Spadina Crescent
Toronto, Ontario M5S 2J5
Canada

Forestry: Graduate Faculty

Full Members

Carleton, Terence - BSc, MSc, PhD
Caspersen, John - BA, PhD (Research Programs Coordinator)
Du, Juan - BDesign, MArch, PhD (Dean)
James, Patrick - PhD
Kant, Shashi - BE, MA, PhD
Malcolm, Jay - BSc, MSc, PhD
Price, Anthony - BSc, MSc, PhD
Sain, Mohini - PhD
Singh, Neera - BSc, MF, PhD
Smith, C. Tattersall - BA, MS, PhD
Smith, Sandy - B AgrSc, MSc, PhD
Thomas, Sean - BA, PhD
Yan, Ning - BSc, PhD, PEng

Members Emeriti

Aird, Paul - BSc, MS, PhD
Blake, Terence - DipFor, BScF, STB, MF, PhD
Bryan, Rorke - BA, PhD
Hubbes, Martin - PhD
Kenney, Andrew - BSc, MSc, PhD
Martell, David - BASc, MASc, PhD
Nautiyal, Jagdish - BSc, MF, PhD
Timmer, Victor - BScF, MScF, PhD

Associate Members

Allison, Jeremy D. - PhD
Bourchier, Robert - BA, MSc, PhD
Cole, William - BScF, MScF, PhD
Couto, Laercio - PhD
Davy, Christina - BSc, MSc, PhD
de Groot, W.J. - BSc, PhD
Feng, Martin W. - MSc
Flannigan, Mike - BSc, MS, PhD
Johnston, Joshua M. - PhD
Jones, Trevor A. - BSc, MSc, PhD
Koven, Anne - PhD
Kuhlberg, Mark - MA, PhD
Kuttner, Benjamin - PhD, PhD
Laaksonen-Craig, Susanna - MSc, PhD
Lantz, Van - B Ec, M Ec, PhD
MacQuarrie, Chris J.K. - PhD
Maynard, Alex - BA, MA, MPH, PhD
McKenney, Daniel - BSc, MSc, PhD
Moola, Faisal - BSc, MSc, PhD
Nanang, David - BSc, MScF, PhD
Nol, Erica - BS, MSc, PhD
Omar Faruk, Abu - PhD
Ray, Justina - BS, MS, PhD
Sastry, Cherla - BSc, MSc, PhD
Forestry: Forest Conservation MFC

Master of Forest Conservation

Program Description

The professionally oriented Master of Forest Conservation (MFC) is an intensive 16-month course-based program with a strong focus on field and laboratory practical training, Canadian and international field courses, practical internships, and individual and group research. It provides a strong, coherent professional education in forest conservation to students from diverse educational backgrounds. The MFC is accredited by the Canadian Forestry Accreditation Board. Graduates are eligible to begin the process of licensure to become a Professional Forester.

The MFC program can be taken on a full-time, extended full-time, or part-time basis.

Full-Time Option

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Forestry's additional admission requirements stated below.

• An appropriate bachelor's degree from a recognized university with an average in each of the final two years of at least mid-B. The MFC program is intended for students with a strong undergraduate background in ecology, environmental sciences, forestry, natural sciences, biology, physical geography, geology, agricultural science, or relevant social sciences. Students from other disciplines will be considered by the department.

• Additional documentation must be submitted to the department with the completed application form, including transcripts, three references, a letter of interest in the MFC program, and a resumé. See the full instructions and forms.

Program Requirements

• The program starts in September and requires full-time intensive involvement throughout.

• Successful completion of 7.5 full-course equivalents (FCEs) as follows:
  o 6.0 required FCEs in FOR courses.
  o 1.5 elective FCEs.
    • Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR3011H, FOR1585H, or, in unusual circumstances, another related field course appropriate to the program and approved by the program director.

• Expected chronology:
  o Year 1: Fall
    • FOR3000H Current Issues in Forest Conservation
    • FOR3001H Biodiversity of Forest Organisms
    • FOR3002H Applied Forest Ecology and Silviculture
    • FOR3003H Economics of Forest Ecosystems
    • FOR3012H Analytical Methods in Forestry
  o Year 1: Spring
    • FOR3004H Forest Management Decision Support Systems
    • FOR3005H Stresses in the Forest Environment
    • FOR3009H Forest Conservation Biology
    • FOR3010H Society and Forest Conservation
  o Year 1: Summer
    • FOR3007H+ Internship in Forest Conservation (Credit/No Credit)
    • FOR3011H International Forest Conservation Field Camp or FOR1585H Urban Forest Conservation Field Camp or, in unusual circumstances, alternate eligible field course (0.5 elective FCE)
  o Year 2: Fall
    • FOR3006H Case Study Analysis in Forest Management
    • FOR3008H Capstone Project in Forest Conservation

• Students may take the remaining 1.0 elective FCE in any session of their program for a total program requirement of 7.5 FCEs.

Program Length

4 sessions (typical registration sequence: F/W/S/F)

Time Limit

3 years

Extended Full-Time Option

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Forestry's additional admission requirements stated below.

• An appropriate bachelor's degree from a recognized university with an average in each of the final two years of at least mid-B. The MFC program is intended for students with a strong undergraduate background in ecology, environmental sciences, forestry, natural sciences, biology, physical geography, geology, agricultural science, or
relevant social sciences. Students from other disciplines will be considered by the department.

- Additional documentation must be submitted to the department with the completed application form, including transcripts, three references, a letter of interest in the MFC program, and a resumé. See the full instructions and forms.

**Program Requirements**

- Full-time students can elect an extended full-time (EFT) option. Under this option, students are allowed an extra year to complete their studies while paying the same academic fees as regular full-time students. Students would, however, pay full-time incidental fees for each year of registration. EFT option students must complete FOR3000H, FOR3001H, and FOR3012H in their first session. The remaining MFC course requirements can be completed in any order except that FOR3007H must be taken in the final Summer session and FOR3008H must be taken in the final Fall session.

- Successful completion of 7.5 **full-course equivalents (FCEs)** as follows:
  - 6.0 required FCEs in FOR courses
    - FOR3000H Current Issues in Forest Conservation
    - FOR3001H Biodiversity of Forest Organisms
    - FOR3002H Applied Forest Ecology and Silviculture
    - FOR3003H Economics of Forest Ecosystems
    - FOR3004H Forest Management Decision Support Systems
    - FOR3005H Stresses in the Forest Environment
    - FOR3006H Case Study Analysis in Forest Management
    - FOR3007H+ Internship in Forest Conservation (Credit/No Credit)
    - FOR3008H Capstone Project in Forest Conservation
    - FOR3009H Forest Conservation Biology
    - FOR3010H Society and Forest Conservation
    - FOR3012H Analytical Methods in Forestry

  - 1.5 elective FCEs:
    - Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR3011H International Forest Conservation Field Camp or FOR1585H Urban Forest Conservation Field Camp, in unusual circumstances, another related field course appropriate to the program and approved by the graduate coordinator.
    - Students may take the remaining 1.0 elective FCE in any session of their program.

**Program Length**

7 sessions (typical registration sequence: F/W/S/F/W/S/F);

**Time Limit**

3 years

**Part-Time Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Forestry’s additional admission requirements stated below.

- An appropriate bachelor’s degree from a recognized university with an average in each of the final two years of at least mid-B. The MFC program is intended for students with a strong undergraduate background in ecology, environmental sciences, forestry, natural sciences, biology, physical geography, geology, agricultural science, or relevant social sciences. Students from other disciplines will be considered by the department.

- Additional documentation must be submitted to the department with the completed application form, including transcripts, three references, a letter of interest in the MFC program, and a resumé. See the full instructions and forms.

**Program Requirements**

- Part-time students must register for FOR3001H Biodiversity of Forest Organisms and FOR3012H Analytical Methods in Forestry in the Fall session of Year 1. They must complete a minimum of 3.0 full-course equivalents (FCEs) of core courses prior to registering for FOR3011H International Forest Conservation Field Camp. The remaining MFC course requirements can be completed in any order except that FOR3007H must be taken in the final Summer session and FOR3008H must be taken in the final Fall session.

- Successful completion of 7.5 **full-course equivalents (FCEs)** as follows:
  - 6.0 FCEs in FOR courses:
    - FOR3000H Current Issues in Forest Conservation
    - FOR3001H Biodiversity of Forest Organisms
    - FOR3002H Applied Forest Ecology and Silviculture
    - FOR3003H Economics of Forest Ecosystems
    - FOR3004H Forest Management Decision Support Systems
    - FOR3005H Stresses in the Forest Environment
    - FOR3006H Case Study Analysis in Forest Management
    - FOR3007H+ Internship in Forest Conservation (Credit/No Credit)
    - FOR3008H Capstone Project in Forest Conservation
    - FOR3009H Forest Conservation Biology
    - FOR3010H Society and Forest Conservation
    - FOR3012H Analytical Methods in Forestry

  - 1.5 elective FCEs:
    - Elective course selection will include the successful completion of one field course (0.5 FCE) from either FOR3011H International Forest Conservation Field Camp or FOR1585H Urban Forest Conservation Field Camp, in unusual circumstances, another related field course appropriate to the program and approved by the graduate coordinator.
    - Students may take the remaining 1.0 elective FCE in any session of their program.
Program: Forestry MScF

Master of Science in Forestry

Program Description

The Master of Science in Forestry (MScF) is a research- and thesis-based program in areas relevant to faculty expertise and funding. These include forest conservation biology and wildlife ecology, forest biosphere science, invasive species and threats to forest health, environmental sustainability of managed forests, fire and ecosystem management, forest conservation planning, sustainable development and economics, political ecology and governance of forests, social and cultural ecology of forest ecosystems, urban forestry, and forest biomaterials science and engineering.

The department considers applicants from a variety of undergraduate backgrounds including forestry; applied science and engineering; and social, physical, and biological sciences.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Forestry's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university, with a final-year average of at least mid-B. A minimum of B+ is required for the collaborative specialization.
- Additional documentation must be submitted to the department with a completed application form, including transcripts, three references, a letter of intent, a resumé, and a writing sample. See the full instructions and forms.

Program Requirements

- Minimal requirements for this degree are:
  - 1.0 full-course equivalent (FCE) as follows:
    - FOR1001H Graduate Seminar (0.5 FCE) plus
    - 0.5 FCE elective.
    - Depending on the student's background, additional or alternative coursework may be required.
  - The preparation of a research thesis of acceptable quality and its oral defence.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)
• Successful completion of a qualifying appraisal examination. The examination will be oral and will ordinarily be taken prior to the completion of 24 months in the program. There are three possible outcomes: pass, decision deferred pending supplementary undertakings, or unsatisfactory. If there is more than one negative vote, the outcome will be judged unsatisfactory. Students are permitted one further attempt.

• Preparation and defence of a thesis that is an original and independent research work adding significantly to the existing body of knowledge.

Program Length
4 years

Time Limit
6 years

PhD Program (Transfer)

Transfer Requirements

• Under certain specific conditions, outstanding registered MScF students may be considered by the end of Year 1 in the MScF program for transfer to the PhD program.

Program Requirements

• Successful completion of 2.0 full-course equivalents (FCEs) as follows:
  o A minimum of three elective half courses (1.5 FCEs) must be taken. To meet this requirement, students can use courses completed towards meeting MScF program requirements. Depending on the student's background and academic goals, additional or alternative coursework may be required by the student's supervisory committee, including courses outside the Graduate Department of Forestry.
  o FOR1001H Graduate Seminar (0.5 FCE). Students require credit for FOR1001H only once.

• Successful completion of a qualifying appraisal examination. The examination will be oral and will ordinarily be taken prior to the completion of 24 months in the program. There are three possible outcomes: pass, decision deferred pending supplementary undertakings, or unsatisfactory. If there is more than one negative vote, the outcome will be judged unsatisfactory. Students are permitted one further attempt.

• Preparation and defence of a thesis that is an original and independent research work adding significantly to the existing body of knowledge.

Program Length
5 years

Time Limit
7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Forestry's additional admission requirements stated below.

• In exceptional circumstances, an extraordinarily strong applicant with an appropriate bachelor's degree from a recognized university may be admitted to the PhD program via direct entry.

• Applicants must submit additional documentation to the department with completed application form, including transcripts, three references, a letter of intent, a résumé, and a writing sample. See the full instructions and forms.

Program Requirements

• Successful completion of 2.0 full-course equivalents (FCEs) as follows:
  o A minimum of three elective half courses (1.5 FCEs) must be taken. Depending on the student's background and academic goals, additional or alternative coursework may be required by the student's supervisory committee, including courses outside the Graduate Department of Forestry.
  o FOR1001H Graduate Seminar (0.5 FCE).

• Successful completion of a qualifying appraisal examination. The examination will be oral and will ordinarily be taken prior to the completion of 24 months in the program. There are three possible outcomes: pass, decision deferred pending supplementary undertakings, or unsatisfactory. If there is more than one negative vote, the outcome will be judged unsatisfactory. Students are permitted one further attempt.

• Preparation and defence of a thesis that is an original and independent research work adding significantly to the existing body of knowledge.

Program Length
5 years

Time Limit
7 years

Forestry: Forestry MFC, MScF, PhD Courses

The Graduate Department of Forestry offers the following courses. Students should consult the departmental website each session to confirm availability. A maximum of one directed
A studies course taken with a student's supervisor can be credited towards meeting departmental degree program requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR1001H</td>
<td>Graduate Seminar (Credit/No Credit)</td>
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<tr>
<td>FOR1270H</td>
<td>Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier</td>
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<tr>
<td>FOR1288H</td>
<td>Design and Manufacturing of Biomaterials</td>
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<td>FOR1294H</td>
<td>Bioenergy and Biorefinery Technology</td>
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<tr>
<td>FOR1412H</td>
<td>Natural Resource Management I (Directed Studies Course)</td>
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<tr>
<td>FOR1413H</td>
<td>Natural Resource Management II (Directed Studies Course)</td>
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<td>FOR1416H</td>
<td>Forest Fire Danger Rating</td>
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<td>FOR1575H</td>
<td>Urban Forest Conservation</td>
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<td>FOR1585H</td>
<td>Urban Forest Conservation Field Camp</td>
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<tr>
<td>JFG1610H</td>
<td>Sustainable Forest Management and Certification</td>
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<td>FOR1900H</td>
<td>Advanced Topics in Forestry I (Directed Studies Course)</td>
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<td>FOR1901H</td>
<td>Advanced Topics in Forestry II (Directed Studies Course)</td>
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<td>FOR3000H</td>
<td>Current Issues in Forest Conservation</td>
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<td>FOR3001H</td>
<td>Biodiversity of Forest Organisms</td>
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<td>FOR3011H</td>
<td>International Forest Conservation Field Camp (Credit/No Credit)</td>
</tr>
<tr>
<td>FOR3012H</td>
<td>Analytical Methods in Forestry</td>
</tr>
<tr>
<td>FOR3013H</td>
<td>Urban and Community Forestry: Leadership and Professional Practice</td>
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</tbody>
</table>

* Course that may continue over a program. The course is graded when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
French Language and Literature

French Language and Literature: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

French Language and Literature

MA and PhD

- Fields:
  - French Linguistics;
  - French Literature

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - French Language and Literature, MA, PhD
- Sexual Diversity Studies
  - French Language and Literature, MA, PhD
- Women and Gender Studies
  - French Language and Literature, MA, PhD

Overview

The Department of French has a rich history dating back to 1853. Since 1925, when the first PhD was granted, the department has remained one of the most reputed departments of its kind in Canada. Many PhD graduates are professors of French in Canadian and foreign universities. Since 1980, the department has graduated more than 200 PhDs.

Graduate students benefit from a number of exceptional resources, including the outstanding collections at the Robarts Library (containing more than 500,000 volumes in French) and the Thomas Fisher Rare Book Library. The department participates in several collaborative specializations and has strong connections with other academic units.

Home to several research groups and projects, the department offers students vital and stimulating collaborative opportunities for research. The department also publishes its own peer-reviewed journal, Arborescences, with graduate student support. Graduate students are welcome to participate in many faculty-led research groups.

The department hosts lectures presented by renowned scholars, giving students a chance to network with specialists in their field. Contemporary writers from France and Québec are frequently invited to read from their works.

Department professors with literary studies expertise specialize in every period of French literature, Québec and francophone literature, and all the major types of literary theory and methodology. In linguistics, particular strengths include first and second language acquisition, languages in contact including creole studies, and formal linguistics. Several linguistics professors have strong links and collaborative research projects with Romance and Hispanic linguists and the Department of Linguistics at U of T.

Graduate students organize Friday workshops, a forum for sharing their work in progress, as well as an annual graduate conference. Linguistics students enjoy access to a top-notch Linguistics Laboratory that is equipped with technology for data analysis, for conducting psycholinguistic experiments, a space for meeting and testing subjects, and a French Linguistics library.

The MA program provides advanced academic development in either literature or linguistics, as well as outstanding training in research and communication skills in French, preparing students for doctoral studies and careers in such fields as teaching, government administration, and communications. PhD students receive rigorous research training in either literature or linguistics, culminating in original research for their doctoral thesis. While primarily training students for academic careers at the university or community college levels, the PhD in French can also lead to employment opportunities in editorial work and professions outside academia.

Contact and Address

Web: www.french.utoronto.ca
Email: french.gradcounsellor@utoronto.ca
Telephone: (416) 926-2307
Fax: (416) 926-2328

Department of French Language and Literature
University of Toronto
50 St. Joseph Street
Toronto, Ontario M5S 1J4
Canada

French Language and Literature: Graduate Faculty

Full Members

Broussseau, Anne-Marie - PhD (Chair and Graduate Chair)
Cahill, James - AB, MA, MA, PhD
Drouin, Sebastien - BA, MA, PhD
Elkabas, Charles - BA, MA, PhD
Havercroft, Barbara - BA, MA, PhD
Holtz, Gregoire - LèsL, MA, DLitt
Kullmann, Dorothea - PhD
LeBlanc, Julie - BA, PhD
French Language and Literature: French Language and Literature MA; Field: French Linguistics

Master of Arts

Program Description

The Master of Arts program is both a self-contained program and the first stage towards doctoral studies. It has two objectives:

- to allow the student to develop a thorough knowledge of the discipline through a program of coursework in French linguistics and
- to develop an aptitude for research.

It is a 12-month program for full-time students; the program is available on a part-time basis.

At the beginning of their course of study, students meet individually with the Associate Chair, Graduate in order to determine course selection with a view to ensuring that the student has a well-rounded program and, considered in conjunction with the undergraduate degree, has a broad knowledge of the discipline.

Field: French Linguistics

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature’s additional admission requirements stated below.
- B+ average standing or better, with at least B+ in French. A B+ average does not automatically lead to admission.
- Competence in French.
- Concentration in French linguistics, with a minimum of five full courses, or equivalent, in French. A minimum of three of the five full courses, or equivalent, should be in the proposed area of study (i.e., linguistics).
- Admission is based upon the evidence of the supporting letters and the applicant’s academic record.

Program Requirements

- Prerequisite work, if necessary.
- Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - FRE1103H Séminaire de linguistique I : Phonétique et phonologie (0.5 FCE);
  - FRE1104H Séminaire de linguistique II : Syntaxe (0.5 FCE);
  - FRE1141H Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus (0.5 FCE);
    - 2.5 FCEs from the regular graduate offerings; or

Members Emeriti

Bertrand-Jennings, Chantal - LèsL, PhD
Bhatt, Parth - BA, MA, PhD
Boursier, Nicole - BLitt, DèsL, PhD
De Kerckhove, Derrick - BA, MA, PhD
Falconer, A. Graham - MA, DDeL'UN
Fitch, Brian - BA, PhD
Fitting, Peter - BA, PhD
Fleming, John - BA, MA, PhD
Grisé, Catherine - BA, MA, PhD
Kerslake, Lawrence - PhD
Kushner, Eva - BA, MPH, PhD
Lehouck, Emile - BA, DèsL
McClelland, John Alan - PhD
O'Neil-Karch, Mariel - BA, MA
Perron, Paul - PhD
Roberge, Yves - BA, MA, PhD
Smith, David - BA, PhD, PhD
Taylor, Robert - PhD
Tolton, Cameron - PhD
Wooldridge, Terence - BA, DDeL'UN

Associate Members

Cobb, Michael - BA, MA, AM, PhD
Colantoni, Laura - MA, PhD
Cuervo, M. Cristina - PhD
Danesi, Marcel - BA, MA, PhD
Dunbar, Ewan - BS, MA, PhD
Faulkner, Morgan - BJ, MA, PhD
Friesner, Michael - BA, MA, PhD
Jennings, Eric - BA, MA, PhD
Krouac Massicotte, Isabelle - BA, MA, PhD
Liakin, Denis - BA, MA, PhD
Massam, Diane - BA, MA, PhD
Papillon, Joelle - PhD
Perez-Leroux, Ana Teresa - MA, PhD
Rannaud, Adrien - LèsL, MA, PhD
Sarabia, Rosa - BA, PhD
Spada, Nina - BA, MA, PhD
Thomson, Clive - BA, MA, PhD

Associate Chair, Graduate; Coordinator, Graduate Admissions and Funding

Steele, Jeffrey - BA, MA, PhD
Tcheuyap, Alexie - BA, MA, PhD
Theriault, Patrick - BA, MA, PhD
Thomine, Marie Claire - PhD

Michelucci, Pascal - BA, MA, PhD
Motsch, Andreas - PhD
Ndayiragije, Juvenal - PhD
Nikiema, Emmanuel - PhD
Paterson, Janet - BA, MA, PhD
Pirvulescu, Mihaela - MA, PhD
Riendeau, Pascal - BA, MA, PhD (Associate Chair, Graduate; Coordinator, Graduate Admissions and Funding)
Steele, Jeffrey - BA, MA, PhD
Tcheuyap, Alexie - BA, MA, PhD
Theriault, Patrick - BA, MA, PhD
Thomine, Marie Claire - PhD

Members Emeriti

Bertrand-Jennings, Chantal - LèsL, PhD
Bhatt, Parth - BA, MA, PhD
Boursier, Nicole - BLitt, DèsL, PhD
De Kerckhove, Derrick - BA, MA, PhD
Falconer, A. Graham - MA, DDeL'UN
Fitch, Brian - BA, PhD
Fitting, Peter - BA, PhD
Fleming, John - BA, MA, PhD
Grisé, Catherine - BA, MA, PhD
Kerslake, Lawrence - PhD
Kushner, Eva - BA, MPH, PhD
Lehouck, Emile - BA, DèsL
McClelland, John Alan - PhD
O'Neil-Karch, Mariel - BA, MA
Perron, Paul - PhD
Roberge, Yves - BA, MA, PhD
Smith, David - BA, PhD, PhD
Taylor, Robert - PhD
Tolton, Cameron - PhD
Wooldridge, Terence - BA, DDeL'UN

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Sarabia, Rosa - BA, PhD
Spada, Nina - BA, MA, PhD
Thomson, Clive - BA, MA, PhD

French Language and Literature: French Language and Literature MA; Field: French Linguistics

Member Emeriti

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Kushner, Eva - BA, MPH, PhD
Lehouck, Emile - BA, DèsL
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Tolton, Cameron - PhD
Wooldridge, Terence - BA, DDeL'UN

Associate Members

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Massam, Diane - BA, MA, PhD
Papillon, Joelle - PhD
Perez-Leroux, Ana Teresa - MA, PhD
Rannaud, Adrien - LèsL, MA, PhD
Sarabia, Rosa - BA, PhD
Spada, Nina - BA, MA, PhD
Thomson, Clive - BA, MA, PhD
2.0 FCEs and FRE5001H Research Essay (0.5 FCE), a mémoire of approximately 35 pages; or
1.5 FCEs and FRE5000Y Research Essay (1.0 FCE), a 65- to 75-page mémoire.

- Students must maintain a B average in order to be recommended for the degree and must obtain a minimum of mid-B in the Research Essay if taken. Students must also obtain a minimum of mid-B for the graduate seminars in linguistics (FRE1103H, FRE1104H, and FRE1141H).
- Up to 1.0 FCE may be taken outside the department, with the permission of the Associate Chair, Graduate.
- Normally, part-time students take the graduate seminars in linguistics during Year 1.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Field: French Literature

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature’s additional admission requirements stated below.
- B+ average standing or better, with at least B+ in French. A B+ average does not automatically lead to admission.
- Competence in French.
- Concentration in French literature, with a minimum of seven full courses, or equivalent, in French. A minimum of five of the seven full courses, or equivalent, should be in the proposed area of study (i.e., literature). Applicants may request that up to 2.0 full-course equivalents (FCEs) of the 5.0 FCEs in the discipline come from cognate disciplines upon the department’s approval.
- Admission is based upon the evidence of the supporting letters and the applicant’s academic record.

Program Requirements

- Prerequisite work, if necessary.
- Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - FRE1202H Séminaire de littérature 1 : théorie (0.5 FCE)
  - FRE1203H Séminaire de littérature 2 : période (0.5 FCE)
  - FRE1204H Séminaire de littérature 3 : genre (0.5 FCE)
    - 2.5 FCEs from the regular graduate course offerings; or
    - 2.0 FCEs and FRE5001H Research Essay (0.5 FCE), a mémoire of approximately 35 pages; or
    - 1.5 FCEs and FRE5000Y Research Essay (1.0 FCE), a 65- to 75-page mémoire.
- Students must maintain a B average in order to be recommended for the degree and must obtain a minimum of mid-B in the Research Essay if taken. Students must also obtain a minimum of mid-B for the graduate seminars in literature (FRE1202H, FRE1203H, and FRE1204H).
- Up to 1.0 FCE may be taken outside the department, with the permission of the Associate Chair, Graduate.
- Normally, part-time students take the graduate seminars in literature during Year 1.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time
French Language and Literature: French Language and Literature PhD; Field: French Linguistics

Doctor of Philosophy

Program Description

The Doctor of Philosophy is necessary preparation for a career in higher education in Canada and abroad which will include teaching and research at an advanced academic level. The PhD includes a combination of advanced seminars, field examinations, a high amount of embedded professional experience in teaching and research, and the presentation of the results of a significant contribution to the discipline in the form of an original dissertation.

The PhD program engages students in a program of study and research in the field of French Linguistics approved by the department. At the beginning of their course of study, students meet individually with the Associate Chair, Graduate in order to determine course selection with a view to ensuring that the student has a well-rounded program and, considered in conjunction with the undergraduate degree, has a broad knowledge of the discipline.

Admission to the PhD program is available via one of two routes: 1) an appropriate master’s degree or 2) direct entry with an appropriate bachelor's degree with high academic standing.

Field: French Linguistics

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature’s additional admission requirements stated below.
- An appropriate master’s degree in French linguistics with high academic standing from a recognized university, with an average grade of at least an A– in the applicant’s overall program.
- An A– average does not automatically lead to admission.
- A formal application and a sample of written work in French completed as part of the applicant's bachelor's or master's program in French linguistics as appropriate. This written work should be a copy of the MA thesis if available.
- Applicants holding a master’s degree must submit a statement of purpose (maximum 500 words) in French that clearly outlines the area in which the applicant intends to pursue research in French linguistics.
- Applicants must satisfy the department that they are capable of independent research in French linguistics at an advanced level.
- Admission to all programs for post-graduate degrees is based on the evidence of the supporting letters and the applicant's academic record.

Program Requirements

- Coursework. Students must successfully complete a total of 3.5 full-course equivalents (FCEs) including:
  - FRE1103H Séminaire de linguistique I : Phonétique et phonologie (0.5 FCE);
  - FRE1104H Séminaire de linguistique II : Syntaxe (0.5 FCE); and
  - FRE1141H Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus (0.5 FCE) (unless already completed); and
  - FRE1201H Méthodes de recherche (Credit/No Credit; 0.5 FCE).
- Students must maintain an average grade of at least an A– during Year 1 to remain in good academic standing and to continue in the PhD program. With the department's permission, students may take 1.0 FCE outside the department.
- Constitution of thesis committee. Students must submit a form indicating the members of their thesis committee and the provisional title of the thesis. This form must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student’s supervisory committee. Deadline to submit: June 15 of Year 1.
- Thesis topic. Students must register a thesis topic with the department. The proposal must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to register the topic: September 15 of Year 2.
- Thesis proposal. A written thesis proposal, of 15 to 20 pages plus bibliography, must be submitted one week before the date of the oral field examination in April (see below).
- Language requirements. Students must demonstrate a reading knowledge of Old French or of another language (excluding French or English), as approved by the department by the end of Year 1.
- Field examination (written and oral components).
  - Students must pass the field examination in Year 2.
  - By November 15 of Year 2, students will submit a text of 20 to 25 pages (double-spaced) in article or thesis chapter format, which outlines the state of the art of current research in the primary domain of the dissertation. This text will form the basis of the short article (to be submitted by March 1) and will be assessed as Pass/Fail.
  - By March 1 of Year 2, students must successfully complete a document in the format of a short article which represents a pilot study or a theoretical puzzle in the field of study driven by data gathered by the student.
  - A student may not proceed to the oral part of the field examination until the written part has been successfully completed. In the case of a failure, the full supervisory committee will meet with the student in order to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the written part of the field examination be retaken in whole or in part within a specific period of time; it may also recommend termination of the student's program.
The oral part of the field examination is to be taken by April 30 of Year 2. It is based on a 15- to 20-page (double-spaced) "thesis proposal" accompanied by an appropriate bibliography. In the case of a failure, the supervisory committee will meet with the student to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the examination be retaken within a specific period of time; it may also recommend termination of the student's program. If the recommendation is to retake the exam, the student may retake the oral part of the examination once only.

Meet with supervisory committee. Between the completion of the written field examination, oral field examination, and the Doctoral Final Oral Examination on the thesis, students will meet with the supervisory committee at least once a year and more frequently if required.

Thesis and Doctoral Final Oral Examination on the thesis.

Program Requirements

**Coursework.** Students must successfully complete a total of 7.5 FCEs as follows:
- In Year 1, complete 4.0 FCEs. In Year 2, complete 3.5 FCEs. These include:
  - FRE1103H Séminaire de linguistique I : Phonétique et phonologie (0.5 FCE);
  - FRE1104H Séminaire de linguistique II : Syntaxe (0.5 FCE);
  - FRE1141H Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus (0.5 FCE);
  - FRED10H Méthodes de recherche (Credit/No Credit; 0.5 FCE).
- Students must maintain an average grade of at least an A– in Year 1 and Year 2 to remain in good academic standing and to continue in the PhD program. With the department's permission, students may take up to 1.0 FCE outside the department in each of Year 1 and Year 2.

**Constitution of thesis committee.** Students must submit a form indicating the members of their thesis committee and the provisional title of the thesis. This form must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to submit: June 15 of Year 2.

**Thesis topic.** Students must register a thesis topic with the department. The proposal must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to register the topic: September 15 of Year 3.

**Thesis proposal.** A written thesis proposal, of 15 to 20 pages plus bibliography, must be submitted one week before the date of the oral field examination in April (see below).

**Language requirements.** Students must demonstrate a reading knowledge of Old French or of another language (excluding French or English), as approved by the department — by the end of Year 2.

**Field examination (written and oral components).**
- Students must pass the field examination in Year 3.
- By November 15 of Year 3, students will submit a text of 20 to 25 pages (double-spaced) in article or thesis chapter format, which outlines the state of the art of current research in the primary domain of the dissertation. This text will form the basis of the short article (to be submitted by March 1) and will be assessed as Pass/Fail.
- By March 1 of Year 3, students must successfully complete a document in the format of a short article which represents a pilot study or a theoretical puzzle in the field of study driven by data gathered by the student.
- A student may not proceed to the oral part of the field examination until the written part has been successfully completed. In the case of a failure, the supervisory committee will meet with the student in order to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the written part of the field examination be retaken in whole or in part within a specific period of time; it may also recommend termination of the student's program.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature's additional admission requirements stated below.

- An appropriate bachelor's degree with high academic standing from a recognized university that includes at least 7.0 full-course equivalents (FCEs) in French language and linguistics, with an average grade of at least an A– in the overall program. A minimum of five of the seven full courses, or equivalent, should be in the proposed area of study (i.e., linguistics). Applicants may request that up to 2.0 FCEs of the 5.0 FCEs in the discipline come from cognate disciplines upon the department's approval. Admission is limited to exceptionally qualified applicants.

- An A– average does not automatically lead to admission.

- A formal application and a sample of written work in French completed as part of the applicant's bachelor's program in French linguistics as appropriate.

- Applicants must satisfy the department that they are capable of independent research in French linguistics at an advanced level.

- Admission to all programs for post-graduate degrees is based on the evidence of the supporting letters and the applicant's academic record.
The oral part of the field examination is to be taken by April 30 of Year 3. It is based on a 15- to 20-page (double-spaced) "thesis proposal" accompanied by an appropriate bibliography. In the case of a failure, the supervisory committee will meet with the student to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the examination be retaken within a specific period of time; it may also recommend termination of the student's program. If the recommendation is to retake the exam, the student may retake the oral part of the examination once only.

- **Meet with supervisory committee.** Between the completion of the written field examination, oral field examination, and the Doctoral Final Oral Examination on the thesis, students will meet with the supervisory committee at least once a year and more frequently if required.
- **Thesis and Doctoral Final Oral Examination** on the thesis.

**Program Length**

5 years

**Time Limit**

7 years

**French Language and Literature: French Language and Literature PhD; Field: French Literature**

**Doctor of Philosophy**

**Program Description**

The Doctor of Philosophy is necessary preparation for a career in higher education in Canada and abroad which will include teaching and research at an advanced academic level. The PhD includes a combination of advanced seminars, field examinations, a high amount of embedded professional experience in teaching and research, and the presentation of the results of a significant contribution to the discipline in the form of an original dissertation.

The PhD program engages students in a program of study and research in French literature approved by the department. At the beginning of their course of study, students meet individually with the Associate Chair, Graduate in order to determine course selection with a view to ensuring that the student has a well-rounded program and, considered in conjunction with the undergraduate degree, has a broad knowledge of the discipline.

Admission to the PhD program is available via one of two routes: 1) an appropriate master's degree or 2) direct entry with an appropriate bachelor's degree with high academic standing.

**Field: French Literature**

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature's additional admission requirements stated below.
- An appropriate master's degree in French literature with high academic standing from a recognized university, with an average grade of at least an A– in the applicant's overall program.
- An A– average does not automatically lead to admission.
- A formal application and a sample of written work in French completed as part of the applicant's bachelor's or master's program in French literature as appropriate. This written work should be a copy of the MA thesis if available.
- Applicants holding a master's degree must submit a statement of purpose (maximum 500 words) in French that clearly outlines the area in which the applicant intends to pursue research in French literature.
- Applicants must satisfy the department that they are capable of independent research in French literature at an advanced level.
- Admission to all programs for post-graduate degrees is based on the evidence of the supporting letters and the applicant's academic record.

**Program Requirements**

- **Coursework.** Students must successfully complete a total of 3.5 full-course equivalents (FCEs) including:
  - FRE1202H Séminaire de littérature 1 : théorie (0.5 FCE);
  - FRE1203H Séminaire de littérature 2 : période (0.5 FCE);
  - FRE1204H Séminaire de littérature 3 : genre (0.5 FCE) (unless these courses or their equivalents have already been completed); and
  - FRE1201H Méthodes de recherche (Credit/No Credit; 0.5 FCE).
- Students must maintain an average grade of at least an A– during Year 1 to remain in good academic standing and to continue in the PhD program. With the department's permission, students may take 1.0 FCE outside the department.
- **Constitution of thesis committee.** Students must submit a form indicating the members of their thesis committee and the provisional title of the thesis. This form must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to submit: June 15 of Year 1.
- **Thesis topic.** Students must register a thesis topic with the department. The proposal must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to register the topic: September 15 of Year 2.
• **Thesis proposal.** A written thesis proposal, of 15 to 20 pages plus bibliography, must be submitted one week before the date of the oral field examination in April (see below).

• **Language requirements.** Students must demonstrate a reading knowledge of Old French or of another language (excluding French or English), as approved by the department by the end of Year 1.

• **Field examination (written and oral components).**
  - Students must pass the field examination in Year 2.
  - By November 15 of Year 2, students will produce a written document of approximately 10 to 15 pages (double-spaced) outlining the major area — the literary corpus, the methodological and theoretical perspectives and approaches — from which the thesis will be derived, together with a thematically organized bibliography indicating the primary and secondary works relevant to this area that the student is expected to know in detail. The "outline of the major area" will form the basis for the written part of the field examination (to be submitted by March 1) and will be assessed as Pass/Fail.
  - By March 1 of Year 2, students must successfully complete a take-home examination designed to test the student's knowledge of the general area of their research; the examination questions are given to students a week ahead of the examination.
  - A student may not proceed to the oral part of the field examination until the written part has been successfully completed. In the case of a failure, the full supervisory committee will meet with the student in order to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the written part of the field examination be retaken in whole or in part within a specific period of time; it may also recommend termination of the student's program.
  - The oral part of the field examination is to be taken by April 30 of Year 2. It is based on a 15- to 20-page (double-spaced) "thesis proposal" accompanied by an appropriate bibliography. In the case of a failure, the supervisory committee will meet with the student to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the examination be retaken within a specific period of time; it may also recommend termination of the student's program. If the recommendation is to retake the exam, the student may retake the oral part of the examination once only.

• **Meet with supervisory committee.** Between the completion of the written field examination, oral field examination, and the Doctoral Final Oral Examination on the thesis, students will meet with the supervisory committee at least once a year and more frequently if required.

• **Thesis and Doctoral Final Oral Examination on the thesis.**

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of French Language and Literature's additional admission requirements stated below.

• An appropriate bachelor's degree with high academic standing from a recognized university that includes at least 7.0 full-course equivalents (FCEs) in French language and literature, with an average grade of at least an A– in the overall program. A minimum of five of the seven full courses, or equivalent, should be in the proposed area of study (i.e., literature). Applicants may request that up to 2.0 FCEs of the 5.0 FCEs in the discipline come from cognate disciplines upon the department's approval. Admission is limited to exceptionally qualified applicants.

• An A– average does not automatically lead to admission.

• A formal application and a sample of written work in French completed as part of the applicant's bachelor's program in French literature as appropriate.

• Applicants must satisfy the department that they are capable of independent research in French literature at an advanced level.

• Admission to all programs for post-graduate degrees is based on the evidence of the supporting letters and the applicant's academic record.

**Program Requirements**

• **Coursework.** Students must successfully complete a total of 7.5 FCEs as follows:
  - In Year 1, complete 4.0 FCEs. In Year 2, complete 3.5 FCEs. These include:
    - FRE1202H Séminaire de littérature 1 : théorie (0.5 FCE);
    - FRE1203H Séminaire de littérature 2 : période (0.5 FCE);
    - FRE1204H Séminaire de littérature 3 : genre (0.5 FCE); and
    - FRE1201H Méthodes de recherche (Credit/No Credit; 0.5 FCE).
  - Students must maintain an average grade of at least an A– in Year 1 and Year 2 to remain in good academic standing and to continue in the PhD program. With the department's permission, students may take up to 1.0 FCE outside the department in each of Year 1 and Year 2.

• **Constitution of thesis committee.** Students must submit a form indicating the members of their thesis committee and the provisional title of the thesis. This form must be signed by the faculty member who has agreed to direct the thesis and by the two faculty members who will serve on the student's supervisory committee. Deadline to submit: June 15 of Year 2.

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• **Thesis proposal.** A written thesis proposal, of 15 to 20 pages plus bibliography, must be submitted one week...
before the date of the oral field examination in April (see below).

- **Language requirements.** Students must demonstrate a reading knowledge of Old French or of another language (excluding French or English), as approved by the department — by the end of Year 2.

- **Field examination (written and oral components).**
  - Students must pass the field examination in Year 3.
  - By November 15 of Year 3, students will produce a written document of approximately 10 to 15 pages (double-spaced) outlining the major area — the literary corpus, the methodological and theoretical perspectives and approaches — from which the thesis will be derived, together with a thematically organized bibliography indicating the primary and secondary works relevant to this area that the student is expected to know in detail. The "outline of the major area" will form the basis for the written part of the field examination (to be submitted by March 1) and will be assessed as Pass/Fail.
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  - The oral part of the field examination is to be taken by April 30 of Year 3. It is based on a 15- to 20-page (double-spaced) "thesis proposal" accompanied by an appropriate bibliography. In the case of a failure, the supervisory committee will meet with the student to discuss the weaknesses that caused the failure and to make specific recommendations concerning the student's program. The committee may recommend that the examination be retaken within a specific period of time; it may also recommend termination of the student's program. If the recommendation is to retake the exam, the student may retake the oral part of the examination once only.

- **Meet with supervisory committee.** Between the completion of the written field examination, oral field examination, and the Doctoral Final Oral Examination on the thesis, students will meet with the supervisory committee at least once a year and more frequently if required.

- **Thesis and Doctoral Final Oral Examination** on the thesis.

### Program Length

- **5 years**

### Time Limit

- **7 years**

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**French Language and Literature: French Language and Literature MA, PhD Courses**

Not all courses are offered every year. Please consult the department regarding course availability.

#### Core Courses

**Linguistics Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FRE1103H</td>
<td>Séminaire de linguistique I : Phonétique et phonologie</td>
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<tr>
<td>FRE1104H</td>
<td>Séminaire de linguistique II : Syntaxe</td>
</tr>
<tr>
<td>FRE1141H</td>
<td>Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus</td>
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</table>

**Literature Courses**

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<th>Course Code</th>
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<tr>
<td>FRE1202H</td>
<td>Séminaire de littérature 1 : théorie</td>
</tr>
<tr>
<td>FRE1203H</td>
<td>Séminaire de littérature 2 : période</td>
</tr>
<tr>
<td>FRE1204H</td>
<td>Séminaire de littérature 3 : genre</td>
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**Linguistic and Literature Courses**

<table>
<thead>
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<th>Course Code</th>
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<tbody>
<tr>
<td>FRE1201H</td>
<td>Méthodes de recherche (Credit/No Credit — for PhD students only)</td>
</tr>
</tbody>
</table>

**Elective Courses**

Not all courses are offered every year. Please consult the department regarding course availability.

**Linguistics Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE1002H</td>
<td>Advanced Oral and Written French for Academic Purposes</td>
</tr>
<tr>
<td>FRE1128H</td>
<td>Le français en contact</td>
</tr>
<tr>
<td>FRE1132H</td>
<td>Problèmes de phonologie : les créoles à base lexicale française</td>
</tr>
<tr>
<td>FRE1136H</td>
<td>Arguments, structures et représentations en français</td>
</tr>
<tr>
<td>FRE1137H</td>
<td>Les mots complexes : études de cas en morphologie</td>
</tr>
<tr>
<td>FRE1138H</td>
<td>Bilinguisme et acquisition du langage</td>
</tr>
<tr>
<td>FRE1141H</td>
<td>Séminaire de linguistique III — Linguistique expérimentale et linguistique de corpus</td>
</tr>
<tr>
<td>FRE1143H</td>
<td>The Evolution of the French Language in Society Throughout the Centuries</td>
</tr>
</tbody>
</table>

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356
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FRE1144H</td>
<td>DP Structure and Adjunct Linearization in French and English</td>
</tr>
<tr>
<td>FRE1145H</td>
<td>La variation linguistique en français hexagonal</td>
</tr>
<tr>
<td>FRE1146H</td>
<td>Acquisition of Sociolinguistic Competence in L2 French</td>
</tr>
<tr>
<td>FRE1147H</td>
<td>Questions et réponses : aspects syntaxiques, phonologiques et discursifs (prerequisites: FRE1104H, FRE1141H)</td>
</tr>
<tr>
<td>FRE1148H</td>
<td>Les sujets postverbaux en français (et au-delà) (prerequisite: FRE1104H)</td>
</tr>
<tr>
<td>FRE1149H</td>
<td>Outils computationnels pour linguistes</td>
</tr>
<tr>
<td>FRE1164H</td>
<td>Initiation au français médiéval</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

### Literature Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FRE1612H</td>
<td>Satire et parole libre dans la littérature des XVIIe et XVIIIe siècles</td>
</tr>
<tr>
<td>FRE1613H</td>
<td>Les récits de voyage dans la littérature française des XVIIe et XVIIIe siècles</td>
</tr>
<tr>
<td>FRE1614H</td>
<td>Le roman aux XVIIe et XVIIIe siècles</td>
</tr>
<tr>
<td>FRE1615H</td>
<td>Littérature française et philosophie</td>
</tr>
<tr>
<td>FRE1815H</td>
<td>Théorie de l’histoire</td>
</tr>
<tr>
<td>FRE1901H</td>
<td>Le récit de voyage au XIXe siècle</td>
</tr>
<tr>
<td>FRE1905H</td>
<td>Baudelaire et la modernité symboliste (1850–1900)</td>
</tr>
<tr>
<td>FRE1906H</td>
<td>Théories du rire et analyse littéraire du genre comique</td>
</tr>
<tr>
<td>FRE1928H</td>
<td>Zola et le naturalisme : du « roman exprimental » au « roman nouveau »</td>
</tr>
<tr>
<td>FRE2004H</td>
<td>Formes et voies romanesques de l’extrême contemporain</td>
</tr>
<tr>
<td>FRE2007H</td>
<td>Littérature et éthique : nouveaux textes, nouvelles problématiques</td>
</tr>
<tr>
<td>FRE2011H</td>
<td>Écrire l’athéisme. perspectives littéraires et philosophiques</td>
</tr>
<tr>
<td>FRE2024H</td>
<td>Altérité et représentation : littératures d’Afrique et des Caraïbes</td>
</tr>
<tr>
<td>FRE2035H</td>
<td>Autour de l’intime en France: les écrits contemporains des femmes</td>
</tr>
<tr>
<td>FRE2036H</td>
<td>Configurations du genre genre dans la prose contemporaine des femmes</td>
</tr>
<tr>
<td>FRE2037H</td>
<td>Écriture et folie</td>
</tr>
<tr>
<td>FRE2039H</td>
<td>Roman et critique sociale aux XXe et XXIe siècles</td>
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### Other Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>FRE2041H</td>
<td>Mémoires (Post)coloniales</td>
</tr>
<tr>
<td>FRE2042H</td>
<td>Intertextualité</td>
</tr>
<tr>
<td>FRE2078H</td>
<td>Altérité : formes et significations</td>
</tr>
<tr>
<td>FRE2079H</td>
<td>Le Roman postmoderne</td>
</tr>
<tr>
<td>FRE2100H</td>
<td>Du texte à l’image : Images photographiques et cinématographiques dans quelques textes contemporains</td>
</tr>
<tr>
<td>FRE2102H</td>
<td>Enjeux des productions culturelles autochtones de langue française au Canada</td>
</tr>
<tr>
<td>FRE2105H</td>
<td>Écritures du moi : de la représentation textuelle à la représentation visuelle du sujet écrivant</td>
</tr>
<tr>
<td>FRE2107H</td>
<td>Le récit fantastique québécois : formes et transformations</td>
</tr>
<tr>
<td>FRE2109H</td>
<td>Histoire des pratiques littéraires et culturelles des femmes au Québec (1830–1960)</td>
</tr>
<tr>
<td>FRE2202H</td>
<td>Littérature et presse au Québec (XXe–XXIe siècles)</td>
</tr>
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### Joint Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>JFC1813H</td>
<td>Littérature de contact et pensée anthropologique en France du XVIe au XVIIIe siècle / Literature of Contact and Anthropological Thought, 16th–18th Century</td>
</tr>
<tr>
<td>JFC5025H</td>
<td>Feminism and Postmodernism: Theory and Practice</td>
</tr>
<tr>
<td>JFC5056H</td>
<td>Autobiography, Photography, Narrativity</td>
</tr>
<tr>
<td>JFC5105H</td>
<td>Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500–1800)</td>
</tr>
<tr>
<td>JFC5120H</td>
<td>The Gift: Stories of a Paradigm</td>
</tr>
<tr>
<td>JFC5129H</td>
<td>Performative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials</td>
</tr>
<tr>
<td>JFC5136H</td>
<td>Allegory and Allegorism in Literature and Fine Arts</td>
</tr>
</tbody>
</table>

0 Course that may continue over a program. The course is graded when completed.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JFF1100H</td>
<td>Surrealisme et cinéma / Surrealism and French Cinema</td>
</tr>
<tr>
<td>JFF1101H</td>
<td>The Art of Exploration: How to Think the World</td>
</tr>
<tr>
<td>JRL1111H</td>
<td>Second Language Acquisition of Romance Phonology</td>
</tr>
</tbody>
</table>

**Cross-Listed Courses**

**Book History and Print Culture**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BKS1001H</td>
<td>Introduction to Book History</td>
</tr>
<tr>
<td>BKS1002H</td>
<td>Book History in Practice</td>
</tr>
<tr>
<td>BKS2000H</td>
<td>Advanced Seminar in Book History and Print Culture</td>
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</table>

**Medieval Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MST3232H</td>
<td>Vernacular Literature in Medieval Europe: Status and Function</td>
</tr>
<tr>
<td>MST3154H</td>
<td>Book History and Print Culture</td>
</tr>
<tr>
<td>MST3155H</td>
<td>Middle French Literature</td>
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</table>

**Sexual Diversity Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SDS1000H</td>
<td>Theoretical and Methodological Issues in Sexual Diversity Studies</td>
</tr>
</tbody>
</table>
Geography and Planning

Geography and Planning: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Geography

MA, MSc, and PhD

- Fields:
  - Environmental Geography and Resource Management;
  - Historical/Social/Cultural Geography;
  - Physical Geography and Natural Systems;
  - Spatial Information Systems;
  - Urban/Economic Geography

Planning

MScPl

- Concentrations:
  - Economic Planning and Policy;
  - Environmental Planning;
  - Social Planning and Policy;
  - Transportation Planning and Infrastructure;
  - Urban Design;
  - Urban Planning and Development

PhD

- Fields:
  - Cities in Global Context: Economic Development and Social Planning;
  - Environmental and Sustainability Planning;
  - Urban Development, Design and the Built Environment

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Community Development
  - Geography, MA
  - Planning, MScPl
- Contemporary East and Southeast Asian Studies
  - Geography, MA
  - Planning, MScPl
- Development Policy and Power
  - Geography, MA
- Diaspora and Transnational Studies
  - Geography, MA, MSc, PhD
- Environment and Health
  - Geography, MA, MSc, PhD
  - Planning, MScPl, PhD
- Ethnic, Immigration and Pluralism Studies
  - Geography, MA, PhD
- Food Studies
  - Geography, MA, MSc, PhD
- Global Health (U of T Global Scholar)
  - Geography, MA, MSc, PhD
  - Planning, MScPl, PhD
- Indigenous Health
  - Geography, MA, PhD
- Jewish Studies
  - Geography, PhD
- Sexual Diversity Studies
  - Geography, MA, PhD
- South Asian Studies
  - Geography, MA, PhD
- Women and Gender Studies
  - Geography, MA, MSc, PhD
  - Planning, MScPl, PhD

Overview

The Department of Geography and Planning offers facilities for research leading to the degrees of Master of Arts (MA), Master of Science (MSc), Master of Science in Planning (MScPl), and Doctor of Philosophy (PhD) in either Geography or Planning. The PhD program prepares students for academic careers in teaching and research. Some may also pursue an advanced career in the public or non-profit sectors, given the rising demand outside of academia for people with a PhD credential.

In Geography, faculty conduct research in the following areas: geomorphology, climatology, hydrology, biogeography, pedology, environmental assessment and sustainable natural resource management, international development, industrial innovation, urban and economic geography, cultural and historical geography, gender studies, social geography, regional analysis, the history and philosophy of geography, remote sensing, computer cartography, spatial statistics, topics in land/geographic information systems, and quantitative analysis. The territories of special concern are Canada, the United States, Latin America, the Caribbean, Northwestern and Central Europe, East Asia, South Asia, and the former Soviet Union.

In Planning, faculty work involves social, economic, cultural, and other vital considerations. In spatial scale, it ranges from the design of individual communities to policy planning at the national level to international development. Planning specializations include land use, transportation, urban design, social policy, public health, economic development, international development, and the environment.

Contact and Address

Web: geography.utoronto.ca
Geography and PhD programs email: graduate.geography@utoronto.ca
MSc Planning program email: planning.geoplan@utoronto.ca
Geography and PhD programs telephone: (416) 978-3377
Geography and Planning: Graduate Faculty

Full Members

Abizaid, Christian - MA, PhD
Archontitis, Georgios - BSc, MSc, PhD
Bathelt, Harald - MA, PhD, CRC
Besco, Laurel - BES, MA, PhD
Boland, Alana - BA, MA, PhD
Brown, Laura - BSc, MSc, PhD
Buliung, Ronald - MA, PhD (Graduate Chair)
Bunce, Susanah - BA, MES, PhD
Caspersen, John - BA, PhD
Chen, Jing - BSc, PhD
Cowen, Tenley - BS, MS, PhD
Cowen, Deborah - BA, MCP, PhD
Cowling, Sharon - BSc, MSc, PhD
Daniere, Amrita - AB, PhD
Desloges, Joseph - BES, MSc, PhD
Desrochers, Pierre - AB, MA, PhD
Diamond, Miriam - MSc, MSc, PhD
DiFrancesco, Richard - PhD (Chair)
Farish, Matthew - BA, PhD
Finkelstein, Sarah - AB, MPH, PhD
Florida, Richard - BA, PhD
Gertler, Meric - AB, MCP, PhD
Gilbert, Emily - PhD
Goonawardena, Kanishka - BSc, MCP, PhD
Gough, William - BSc, MSc, PhD
Hackworth, Jason - BA, MA, MCP, PhD
Harvey, Danny - BSc, MSc, PhD
He, Yuhong - PhD
Hess, Paul - BA, MA, PhD
Hunter, Mark - BA, MSS, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
Isakson, Ryan - BEc, BA, PhD
Kant, Shashi - BE, MA, PhD
Kepe, Thembela - MS, PhD
Klenk, Nicole - BS, MSc, PhD
Leslie, Deborah - BA, MA, PhD (Associate Chair, Graduate Geography)
Lewis, Robert - BA, MA, PhD
MacDonald, Ken - BA, MA, PhD
Maclaren, Virginia - BA, MRP, MSc, PhD
Malcolm, Jay - BSc, MSc, PhD
Miller, Eric - BASc, MSc, PhD
Miron, John - BA, MA, MSc, PhD
Mitchell, Carl - PhD
Mollett, Sharlene - BA, MES, DA
Olive, Andrea - PhD
Oswin, Natalie Karen - BA, MA, PhD
Poland, Blake - BA, PhD
Prudham, Scott - BASc, BA, MA, PhD
Rankin, Katharine - BA, MA, PhD
Ruddick, Susan - PhD
Siemiarycki, Matti - BA, MSc, PhD
Silvey, Rachel - BA, MA, PhD
Simpson, Myrna - BS, DPhil
Singh, Neera - BSc, MF, PhD
Smith, C. Tattersall - BA, MS, PhD
Sorensen, Andre - BFA, MSc, PhD
Vinodrai, Tara - BA, MA, PhD
Wakefield, Sarah - BA, MA, PhD
Walks, Alan - BA, MA, PhD
Wells, Matthew - BS, DPhil
Widener, Michael - PhD
Wilson, Kathleen - AB, AM, PhD
Zhang, Jun - BS, MS, PhD

Members Emeriti

Bourne, Larry - BA, MA, PhD
Britton, John - BA, MA, PhD
Gad, Gunter - DPhil, PhD
Galloway, John - BA, MA, PhD
Greenwood, Brian - BSc, PhD
Munro, D. Scott - BSc, MSc, PhD
Savan, Beth - BSc, PhD

Associate Members

Allahwala, Ahmed - MA, PhD
Arik, Hulya - BA, MA, PhD
Boyes, Donald - BS, MA, PhD
Brael, Shauna - BA, MA, PhD
Breznitz, Shiri - BA, MA, PhD
Daigle, Michelle - BA, MA, PhD
DeLoyde, Carolyn - BA, MRP
Dorries, Heather - BA, MS, PhD
Dowler, Robert - BA, MSc
Dunn, James - AB, AM, PhD
Farrow, John - MBA
Flynn, Alexandra - LLB, BA, LLM, MA, PhD
Goffe, Rachel - BA, PhD
Hanssen, Jens - BPhil, DPhil
Higgins, Christopher - BA, MA, PhD
Kipfer, Stefan - BA, MES, PhD
Laliberte, Nicole - BA, MS, PhD
Latulippe, Nicole Monique - BA, MA, PhD
Leydon, Joseph - BA, MA, PhD
Liu, Jane - BSc, MSc, PhD
Maddalena, Damian - BS, MS, MA, PhD
Maringanti, Anant - BE, MA, PhD
Martin, Adam - BA, MF, PhD
McLaughlin, James - PhD
Murck, Barbara - AB, PhD
Roberts, David - DA
Ross, Tim - PhD
Spicer, Jason - PhD
Stephens, Lindsay - BA, BA, MSc, MSc, PhD, PhD
Straw, William - PhD
Wang, Ju - BS, MPH, PhD
Zimmerman, Peter - BA, MES
Geography and Planning: Geography MA

Master of Arts

Program Description

The MA program offers studies in areas of human geography, including historical/social/cultural geography, urban/economic geography, environmental geography and resource management and some areas of spatial information systems. Applicants should apply to the MA degree program (rather than the MSc) if their planned research contains a substantial human geography component and if two-thirds of their planned coursework comprises Geography courses accepted by the department as social science courses.

MA Program (Thesis Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a minimum standing equivalent to at least a University of Toronto B+ in the final two years.
- Applicants are expected to have completed at least 4.0 full-course equivalents (FCEs) in geography or a related field. Applicants lacking the minimum requirements should consider doing qualifying work at the undergraduate level prior to application. Such work should be undertaken in consultation with the Graduate Coordinator. Applicants who hold an appropriate bachelor’s degree but are changing disciplines or require further preparatory work, may be required to complete an additional year of graduate-level coursework.

Program Requirements

- Progress into the second session is dependent on achieving an overall B average in the first session and satisfactory progress as outlined in the Graduate Geography Handbook.
- Students undertake research leading to the preparation of a thesis (RST9999Y), in conjunction with at least the equivalent of 1.5 FCEs in coursework including:
  - 0.5 FCE core course GGR1105H Human Geography Core Course;
  - 0.5 FCE elective course in geography or from an approved list of courses available from the department; and
  - 0.5 FCE elective course that may be taken inside or outside the department.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

MA Program (Research Paper Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a minimum standing equivalent to at least a University of Toronto B+ in the final two years.
- Applicants are expected to have completed at least 4.0 full-course equivalents (FCEs) in geography or a related field. Applicants lacking the minimum requirements should consider doing qualifying work at the undergraduate level prior to application. Such work should be undertaken in consultation with the Graduate Coordinator. Applicants who hold an appropriate bachelor’s degree but are changing disciplines or require further preparatory work, may be required to complete an additional year of graduate-level coursework.

Program Requirements

- Progress into the second session is dependent on achieving an overall B average in the first session and satisfactory progress as outlined in the Graduate Geography Handbook.
- Students will undertake research leading to the preparation of a major research paper (GGR1100Y, 1.0 FCE), in conjunction with the equivalent of 3.0 graduate FCEs in coursework including:
  - 0.5 FCE core course GGR1105H Human Geography Core Course;
  - 1.5 FCE elective courses in geography or from an approved list of courses available from the department; and
  - 1.0 FCE elective courses, 0.5 FCE of which must be taken outside the department.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time
Geography and Planning: Geography MSc

Master of Science

Program Description

The MSc program offers studies in the areas of physical geography, spatial information systems and some areas of environmental studies. Applicants should apply to the MSc degree program (rather than the MA) if their planned research contains a substantial physical science component and if two-thirds of their planned coursework comprises Geography courses accepted by the department as physical science courses.

MSc Program (Thesis Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a minimum standing equivalent to at least a University of Toronto B+ in the final two years.
- Applicants are expected to have completed at least 4.0 full-course equivalents (FCEs) in geography or a related discipline. Applicants lacking the minimum requirements should consider doing qualifying work at the undergraduate level prior to application. Such work should be undertaken in consultation with the Graduate Coordinator. Applicants who hold an appropriate bachelor’s degree but are changing disciplines or require further preparatory work, may be required to complete an additional year of graduate-level coursework.

Program Requirements

- Progress into the second session is dependent on achieving an overall B average in the first session and satisfactory progress as outlined in the Graduate Geography Handbook.
- Students undertake research leading to the preparation of a thesis (RST999Y), in conjunction with at least the equivalent of 1.5 FCEs in coursework including:
  - 0.5 FCE core course GGR1200H Physical Geography Core Course;
  - 0.5 FCE elective course in geography or from an approved list of courses available from the department; and
  - 0.5 FCE elective course that may be taken inside or outside the department.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

MSc Program (Research Paper Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a minimum standing equivalent to at least a University of Toronto B+ in the final two years.
- Applicants are expected to have completed at least 4.0 full-course equivalents (FCEs) in geography or a related discipline. Applicants lacking the minimum requirements should consider doing qualifying work at the undergraduate level prior to application. Such work should be undertaken in consultation with the Graduate Coordinator. Applicants who hold an appropriate bachelor’s degree but are changing disciplines or require further preparatory work, may be required to complete an additional year of graduate-level coursework.

Program Requirements

- Progress into the second session is dependent on achieving an overall B average in the first session and satisfactory progress as outlined in the Graduate Geography Handbook.
- Students will undertake research leading to the preparation of a major research paper (GGR1100Y; 1.0 FCE), in conjunction with the equivalent of 3.0 graduate FCEs in coursework including:
  - 0.5 FCE core course GGR1200H Physical Geography Core Course;
  - 1.5 FCE elective courses in geography or from an approved list of courses available from the department; and
  - 1.0 FCE elective courses, 0.5 FCE of which must be taken outside the department.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time
Geography and Planning: Geography PhD
Fields: 1) Physical Geography and Natural Systems; 2) Spatial Information Systems

Doctor of Philosophy

Program Description

The PhD is primarily a research degree. A program of study is designed for each student to ensure competence in a field of research and to facilitate the preparation of a dissertation.

Applicants may enter the PhD program via one of two routes: 1) following completion of a master's degree or 2) direct entry after completing a bachelor's degree.

Fields:
Physical Geography and Natural Systems;
Spatial Information Systems

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning's additional admission requirements stated below.
- An appropriate master's degree from a recognized university, with a minimum standing equivalent to at least a University of Toronto A–.

Program Requirements

- Complete a minimum of 1.5 full-course equivalents (FCEs) in coursework as follows:
  - 0.5 FCE core course GGR1200H *Physical Geography Core Course*. Students who have taken GGR1200H at the master's level may take an alternative geography course;
  - 0.5 FCE in geography courses or from a list of approved courses available from the department;
  - 0.5 FCE in elective courses which may be taken in any departments.
  - Students who hold an appropriate master's degree but are changing disciplines or require further preparatory work may be required to complete additional coursework.
- Submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in Year 1.
- Pass a PhD examination in the general field in which research is being undertaken between June of Year 1 and no later than December of Year 2. The scope and areas of concentration of the exam are to be determined jointly by the supervisory committee and the student. There are two components of the PhD exam:
  - A written exam (options are an eight-hour closed room exam on campus in one day or over two days, or a five-day off-campus exam).
  - An oral exam to take place within one week of the written exam.
- A student who fails the PhD examination may retake the exam once within six months. Failure of the second exam may result in a recommendation for termination from the program.
- Acquire knowledge of a foreign language necessary for research upon the recommendation of the supervisory committee.
- Submit a research proposal that is acceptable to the supervisory committee, normally by the end of June of Year 2 and no later than September of Year 3.
- Unless otherwise specified, two years of residence are required whereby the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in University activities associated with the program.
- Complete a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from a major area of study. The thesis shall constitute a significant contribution to the knowledge of the field and must be conducted while the student is registered in the PhD program.
- See the Graduate Geography Handbook and visit the department's website.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning's additional admission requirements stated below.
- In exceptional cases and at the discretion of the department, admission to the PhD program by direct entry may be approved for applicants with an overall A average and an appropriate bachelor's degree from a recognized university.

Program Requirements

- Complete a minimum of 3.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course GGR1200H *Physical Geography Core Course*;
• 0.5 FCE in geography courses or from a list of approved courses available from the department;
• 2.0 FCE in elective courses which may be taken in any department.
• Submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in Year 1.
• Pass a PhD examination in the general field in which research is being undertaken between June of Year 1 and no later than December of Year 2. The scope and areas of concentration of the exam are to be determined jointly by the supervisory committee and the student. There are two components of the PhD exam:
  o A written exam (options are an eight-hour closed room exam on campus in one day or over two days, or a five-day off-campus exam).
  o An oral exam to take place within one week of the written exam.
• A student who fails the PhD examination may retake the exam once within six months. Failure of the second exam may result in a recommendation for termination from the program.
• Acquire knowledge of a foreign language necessary for their research upon the recommendation of their supervisory committee.
• Submit a research proposal that is acceptable to the supervisory committee, normally by the end of June of Year 2 and no later than September of Year 3.
• Unless otherwise specified, two years of residence are required whereby the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the University activities associated with the program.
• Complete a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from a major area of study. The thesis shall constitute a significant contribution to the knowledge of the field and must be conducted while the student is registered in the PhD program.
• PhD degree program details are fully described in the Graduate Geography Handbook and the department’s website.

Program Length

5 years

Time Limit

7 years


Doctor of Philosophy

Program Description

The PhD is primarily a research degree. A program of study is designed for each student to ensure competence in a field of research and to facilitate the preparation of a dissertation.

Applicants may enter the PhD program via one of two routes: 1) following completion of a master’s degree or 2) direct entry after completing a bachelor’s degree.

Fields:
Environmental Geography and Resource Management; Historical/Social/Cultural Geography; Urban/Economic Geography

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
• An appropriate master's degree from a recognized university, with a minimum standing equivalent to at least a University of Toronto A–.

Program Requirements

• Complete a minimum of 3.0 full-course equivalents (FCEs) in coursework including:
  o 0.5 FCE core course GGR1110H Issues in Geographic Thought and Practice.
  o 1.0 FCE in geography courses or from a list of approved courses available from the department.
  o At least 0.5 FCE but not more than 1.5 FCE courses in other departments.
  o In exceptional cases, at the discretion of the department, up to 1.0 FCE of graduate courses completed at the master's level at the University of Toronto may be counted towards meeting some course requirements.
Students who hold an appropriate master’s degree but are changing disciplines or require further preparatory work may be required to complete additional coursework.

- Submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in Year 1.
- Pass a PhD examination in the general field in which research is being undertaken between June of Year 1 and no later than December of Year 2. The scope and areas of concentration of the exam are to be determined jointly by the supervisory committee and the student. There are two components of the PhD exam:
  - A written exam (options are an eight-hour closed room exam on campus in one day or over two days, or a five-day off-campus exam).
  - An oral exam to take place within one week of the written exam.
- A student who fails the PhD examination may retake the exam once within six months. Failure of the second exam may result in a recommendation for termination from the program.
- Acquire knowledge of a foreign language necessary for research upon the recommendation of the supervisory committee.
- Submit a research proposal that is acceptable to the supervisory committee, normally by the end of June of Year 2 and no later than September of Year 3.
- Unless otherwise specified, two years of residence are required whereby the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the University activities associated with the program.
- Complete a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from a major area of study. The thesis shall constitute a significant contribution to the knowledge of the field and must be conducted while the student is registered in the PhD program.
- PhD degree program details are fully described in the Graduate Geography Handbook and the department’s website.

Program Requirements

- Complete a minimum of 3.0 full-course equivalents (FCEs) in coursework as follows:
  - 0.5 FCE core course GGR1110H Issues in Geographic Thought and Practice.
  - 1.0 FCE in geography courses or from a list of approved courses available from the department.
  - at least 0.5 FCE but no more than 1.5 FCE courses in other departments.
- Submit a research statement concerning the proposed PhD topic and the scope of the PhD examination by the end of April in Year 1.
- Pass a PhD examination in the general field in which research is being undertaken between June of Year 1 and no later than December of Year 2. The scope and areas of concentration of the exam are to be determined jointly by the supervisory committee and the student. There are two components of the PhD exam:
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- A student who fails the PhD examination may retake the exam once within six months. Failure of the second exam may result in a recommendation for termination from the program.
- Acquire knowledge of a foreign language necessary for research upon the recommendation of the supervisory committee.
- Submit a research proposal that is acceptable to the supervisory committee, normally by the end of June of Year 2 and no later than September of Year 3.
- Unless otherwise specified, two years of residence are required whereby the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the University activities associated with the program.
- Complete a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from a major area of study. The thesis shall constitute a significant contribution to the knowledge of the field and must be conducted while the student is registered in the PhD program.
- See the Graduate Geography Handbook and visit the department’s website.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.

Program Length

5 years

Time Limit

7 years
Geography and Planning: Geography MA, MSc, PhD Courses

The following graduate courses will be available on demand and subject to faculty resources. Not all courses are given every year, and some members of the graduate faculty are on research leave. Please consult the departmental graduate office. The 2000-level courses are normally open to PhD students only.

### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GGR1105H</td>
<td>Human Geography Core Course</td>
</tr>
<tr>
<td>GGR1110H</td>
<td>Issues in Geographic Thought and Practice</td>
</tr>
<tr>
<td>GGR1200H</td>
<td>Physical Geography Core Course</td>
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### Research Methods Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GGR1111H</td>
<td>Social Research Methods</td>
</tr>
<tr>
<td>JPG1120H</td>
<td>Advanced Qualitative Research: Methodology and Epistemological Foundations for Planning and Geography</td>
</tr>
<tr>
<td>JPG1140H</td>
<td>Discourse Analysis Methodology</td>
</tr>
<tr>
<td>JPG1170H</td>
<td>Statistical Testing and Analysis</td>
</tr>
<tr>
<td>GGR1218H</td>
<td>Quantitative, Open-Source Methods in Physical Geography Research</td>
</tr>
<tr>
<td>JPG1400H</td>
<td>Advanced Quantitative Methods</td>
</tr>
</tbody>
</table>

### Individual Topics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GGR1149H,Y</td>
<td>Readings in Selected Topics</td>
</tr>
<tr>
<td>GGR2149H,Y</td>
<td>Readings in Selected Topics</td>
</tr>
<tr>
<td>GGR2150H,Y</td>
<td>Advanced Seminar in Selected Topics</td>
</tr>
<tr>
<td>JPG2150H</td>
<td>Advanced Seminars in Selected Topics</td>
</tr>
<tr>
<td>GGR2151H</td>
<td>Advanced Seminars in Selected Topics II</td>
</tr>
<tr>
<td>JPG2151H</td>
<td>Advanced Seminars in Selected Topics II</td>
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### Environmental and Resource Geography

<table>
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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>GGR1404H</td>
<td>Global Warming (exclusion: GGR314H1)</td>
</tr>
<tr>
<td>GGR1406H</td>
<td>Energy Supply and Use (exclusion: GGR333H1)</td>
</tr>
<tr>
<td>GGR1407H</td>
<td>Efficient Use of Energy (exclusion: GGR347H1)</td>
</tr>
<tr>
<td>GGR1408H</td>
<td>Carbon-Free Energy (exclusions: GGR1406H, GGR348H1)</td>
</tr>
<tr>
<td>GGR1411H</td>
<td>Nature and Justice in the Anthropocene</td>
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### Geographical Information Analysis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>JPG1906H</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>JPG1909H</td>
<td>Advanced GIS Data Processing</td>
</tr>
<tr>
<td>GGR1911H</td>
<td>Remote Sensing (exclusions: GGR337H1, GGR437H1, GGR1912H)</td>
</tr>
<tr>
<td>GGR1912H</td>
<td>Advanced Remote Sensing (exclusions: GGR337H1, GGR437H1, GGR1911H)</td>
</tr>
<tr>
<td>JPG1914H</td>
<td>Geographic Information Systems Research Project (exclusion: GGR462H1)</td>
</tr>
<tr>
<td>GGR1916H</td>
<td>Remote Sensing of Vegetation Traits and Function (exclusion: GGR414H1S)</td>
</tr>
<tr>
<td>GGR1921H</td>
<td>Land/Geographic Information Systems</td>
</tr>
</tbody>
</table>

### Historical, Social, and Cultural Geography

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JPG1503H</td>
<td>Space, Time, Revolution</td>
</tr>
<tr>
<td>JPG1506H</td>
<td>State/Space/Difference: Understanding the New Social Geography of the State</td>
</tr>
<tr>
<td>JPG1511H</td>
<td>The Commons: Geography, Planning, Politics</td>
</tr>
<tr>
<td>JPG1520H</td>
<td>Contested Geographies of Class-Race Formations</td>
</tr>
<tr>
<td>JPG1672H</td>
<td>Land and Justice</td>
</tr>
<tr>
<td>GGR1705H</td>
<td>Historical Geographies of Modernity</td>
</tr>
<tr>
<td>JPG1706H</td>
<td>Violence and Security</td>
</tr>
<tr>
<td>GGR1714H</td>
<td>Geographies of Citizenship</td>
</tr>
<tr>
<td>JPG1804H</td>
<td>Space, Power, and Geography: Understanding Spatiality</td>
</tr>
<tr>
<td>JPG1805H</td>
<td>Transnationalism, Diaspora, and Gender</td>
</tr>
</tbody>
</table>
### Geography and Planning: Planning MScPl

#### Master of Science in Planning

**Program Description**

Students normally enrol for two years of full-time study, although part or all of the requirements of the program may be met by part-time study, with the approval of the Program Director.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning’s additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university, with a minimum final-year standing in the social or life sciences, the humanities, or the professions, equivalent to at least a University of Toronto B+

Knowledge of introductory economics and statistics, as well as word processing and spreadsheet skills, is preferred prior to entry.

**Program Requirements**

- The program consists of **8.0 full-course equivalents (FCEs)** plus the PLA4444Y internship, taken over two years, as follows:
  - 4.0 FCEs in core courses
  - 4.0 FCEs chosen from the list of electives and from the offerings of other departments, centres, and institutes

At least 2.5 FCEs of these electives must fit into an approved concentration in one of the following six fields:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGR1807H</td>
<td>Geographies of Postcolonality and Development: Exploring the 'Infrastructure Turn'</td>
</tr>
<tr>
<td>JG1809H</td>
<td>Spaces of Work: Value, Identity, Agency, Justice</td>
</tr>
<tr>
<td>GGR1811H</td>
<td>Troubling Militarism: Space, Affect, Economy</td>
</tr>
<tr>
<td>JG1812Y</td>
<td>Planning for Change: Community Development in Practice</td>
</tr>
<tr>
<td>JG1813H</td>
<td>Planning and Social Policy</td>
</tr>
<tr>
<td>JG1815H</td>
<td>Political Economy, the Body, and Health</td>
</tr>
<tr>
<td>GGR1816H</td>
<td>Geographies of Secularism, Islam, and Gender</td>
</tr>
<tr>
<td>JG1818H</td>
<td>The Geography and Planning of Climate Action and Activism</td>
</tr>
<tr>
<td>GGR1821H</td>
<td>China Development Seminar</td>
</tr>
<tr>
<td>GGR1822H</td>
<td>Queer Geographies</td>
</tr>
<tr>
<td>JG1825H</td>
<td>Black Geographies of the Atlantic</td>
</tr>
<tr>
<td>JG1830H</td>
<td>Utopia/Dystopia</td>
</tr>
<tr>
<td>GGR1832H</td>
<td>Geographies of Decolonization and Liberation</td>
</tr>
<tr>
<td>JG1835H</td>
<td>Anti-Colonial Planning: Theory and Practice</td>
</tr>
<tr>
<td>JG1554H</td>
<td>Transportation and Urban Form</td>
</tr>
<tr>
<td>JG1558H</td>
<td>The History and Geography of Cycles and Cycling</td>
</tr>
<tr>
<td>JG1605H</td>
<td>The Post-Industrial City</td>
</tr>
<tr>
<td>JG1607H</td>
<td>Geography of Competition</td>
</tr>
<tr>
<td>JG1569H</td>
<td>Cities, Industry, and the Environment</td>
</tr>
<tr>
<td>GGR1610H</td>
<td>Geography of Finance and Financial Crisis</td>
</tr>
<tr>
<td>JG1615H</td>
<td>Planning and the Social Economy</td>
</tr>
<tr>
<td>JG1616H</td>
<td>The Cultural Economy</td>
</tr>
<tr>
<td>JG1617H</td>
<td>Organization of Economies and Cities</td>
</tr>
<tr>
<td>JG1621H</td>
<td>Innovation and Governance</td>
</tr>
<tr>
<td>JG1660H</td>
<td>Regional Dynamics</td>
</tr>
<tr>
<td>JG1670H</td>
<td>Regional Economic Analysis</td>
</tr>
<tr>
<td>JG1814H</td>
<td>Cities and Immigrants</td>
</tr>
<tr>
<td>JG1820H</td>
<td>Disability and the City</td>
</tr>
</tbody>
</table>

### Physical Geography

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGR1202H</td>
<td>Sedimentation and Fluvial Geomorphology (exclusion: GGR301H)</td>
</tr>
<tr>
<td>GGR1215H</td>
<td>Advanced Watershed Hydroecology (exclusion: GGR413H1)</td>
</tr>
<tr>
<td>GGR1216H</td>
<td>Advanced Biogeochemical Processes (exclusion: GGR406H1)</td>
</tr>
<tr>
<td>GGR1217H</td>
<td>The Climate of the Arctic (exclusion: GGR484H1)</td>
</tr>
<tr>
<td>GGR1302H</td>
<td>Advanced Hydrology and Water Quality (exclusion: GGR407H1)</td>
</tr>
<tr>
<td>GGR1315H</td>
<td>The Cryosphere (exclusion: GGR317H1)</td>
</tr>
</tbody>
</table>

### Urban and Economic Geography

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JG1502H</td>
<td>Global Urbanism and Cities of the Global South</td>
</tr>
<tr>
<td>JG1504H</td>
<td>Institutionalism and Cities: Space, Governance, Property and Power</td>
</tr>
<tr>
<td>JG1507H</td>
<td>Housing Markets and Housing Policy Analysis</td>
</tr>
<tr>
<td>JG1512H</td>
<td>Place, Politics, and the Urban</td>
</tr>
<tr>
<td>JG1516H</td>
<td>Declining Cities</td>
</tr>
<tr>
<td>JG1518H</td>
<td>Sustainability and Urban Communities</td>
</tr>
</tbody>
</table>

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<td>JG1554H</td>
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<td>The History and Geography of Cycles and Cycling</td>
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<td>JG1605H</td>
<td>The Post-Industrial City</td>
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<tr>
<td>JG1607H</td>
<td>Geography of Competition</td>
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<td>Cities and Immigrants</td>
</tr>
<tr>
<td>JG1820H</td>
<td>Disability and the City</td>
</tr>
</tbody>
</table>
Economic Planning and Policy
Environmental Planning
Social Planning and Policy
Transportation Planning and Infrastructure
Urban Design
Urban Planning and Development

- PLA4444H *Internship* (0.0 FCE). Students are required to pursue a planning internship between Years 1 and 2 of the program. Part-time students who are currently employed in a planning environment may be exempted from this requirement; however, the Planning Director retains final discretion in the decision.

- Progress into Year 2 of the program is normally dependent upon the achievement of an overall B average in the first year. Equivalent provisions apply to the part-time option.

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
12 sessions part-time

**Time Limit**

3 years full-time;
6 years part-time

**Geography and Planning: Planning PhD**

**Doctor of Philosophy**

**Program Description**

The PhD is primarily a research degree. A program of study is designed for each student to ensure competence in a field of research and to facilitate the preparation of a dissertation.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Geography and Planning's additional admission requirements stated below.
- An appropriate master's degree in planning or a related field, or its equivalent from a recognized university, with a minimum standing equivalent to at least a University of Toronto A– and demonstrated competence in analytical methods or successful completion of one of two methods courses in the current master's program.

**Program Requirements**

All PhD students must:

- Take 3.0 *full-course equivalents (FCEs)*, if they hold a master's degree in planning comparable to the U of T MSc in Planning, as follows:
  - 1.5 FCEs in core courses
  - 1.5 FCEs in electives (at least 0.5 elective FCE must be outside the Planning program).
  - Students who enter with a master's degree in a related field may be required to take up to an additional 1.0 FCE depending on their background and experience.

- Submit a *research statement* concerning the proposed PhD topic and the scope of the PhD examination by the end of April in Year 1.
- Pass a *PhD examination* in the general field in which research is being undertaken between June of Year 1 and no later than December of Year 2. The scope and areas of concentration of the exam are to be determined jointly by the supervisory committee and the student. There are two components of the PhD exam:
  - a written exam (options are an eight-hour closed room exam on campus in one day or over two days, or a five-day off-campus exam); and
  - an oral exam to take place within one week of the written exam.

A student who fails the PhD examination may retake the exam once within six months. A failure of the second exam may result in recommendation for termination of the student's program.

- Acquire knowledge of a *foreign language* necessary for their research upon the recommendation of their committee.

- Submit a *research proposal* that is acceptable to their research committee, normally by the end of June of Year 2 and no later than September of Year 3.

- Be in residence for two years, unless otherwise specified, during which the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the University activities associated with the program.

- Complete a *thesis* embodying the results of original investigation, conducted by the candidate, on the approved topic from a major area of study. The thesis shall constitute a significant contribution to the knowledge of the field and must be conducted while the student is registered in the PhD program.

- PhD degree program details are fully described in the [Graduate Geography Handbook](#) and the [department's website](#).

**Program Length**

4 years full-time

**Time Limit**

6 years full-time

**Geography and Planning: Planning MScPI, PhD Courses**

All courses are not given every year; some faculty members may be on research leave. Please consult the departmental graduate office for details.
Core Courses for the MScPl

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA1101H</td>
<td>Planning History, Thought, and Practice</td>
</tr>
<tr>
<td>PLA1102H</td>
<td>Planning Decision Methods I</td>
</tr>
<tr>
<td>PLA1103H</td>
<td>Legal Basis of Planning</td>
</tr>
<tr>
<td>PLA1105H</td>
<td>Planning Decision Methods II</td>
</tr>
<tr>
<td>PLA1106H</td>
<td>Workshop in Planning Practice</td>
</tr>
<tr>
<td>PLA1107Y</td>
<td>Current Issues Paper</td>
</tr>
<tr>
<td>PLA1520H</td>
<td>Project Management and Conflict Resolution for Planners</td>
</tr>
</tbody>
</table>

Core Courses for the PhD in Planning

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<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGR1111H</td>
<td>Social Research Methods (or a methods course in a related department subject to the approval of the supervisor)</td>
</tr>
<tr>
<td>PLA2000H</td>
<td>Advanced Planning Theory</td>
</tr>
<tr>
<td>PLA2001H</td>
<td>Planning Colloquium (Credit/No Credit)</td>
</tr>
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Elective Courses

<table>
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<th>Course Code</th>
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<tr>
<td>JPG1120H</td>
<td>Advanced Qualitative Research: Methodology and Epistemological Foundations for Planning and Geography</td>
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<td>JPG1140H</td>
<td>Discourse Analysis Methodology</td>
</tr>
<tr>
<td>JPG1170H</td>
<td>Statistical Testing and Analysis</td>
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<td>PLA1149H</td>
<td>Independent Study</td>
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<tr>
<td>JPG1400H</td>
<td>Advanced Quantitative Methods</td>
</tr>
<tr>
<td>JGE1413H</td>
<td>Workshop in Environmental Impact Assessment</td>
</tr>
<tr>
<td>JPG1416H</td>
<td>Environmental Consequences of Land Use Change</td>
</tr>
<tr>
<td>JPG1418H</td>
<td>Rural Land Use Planning</td>
</tr>
<tr>
<td>JGE1420H</td>
<td>Urban Waste Management: an International Perspective</td>
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<tr>
<td>JGE1426H</td>
<td>Natural Resources, Difference, and Conflict</td>
</tr>
<tr>
<td>JPG1427H</td>
<td>The (Re)Localization of Food Production: Debates and Controversies</td>
</tr>
<tr>
<td>JPG1428H</td>
<td>Greening the City: Urban Environmental Planning and Management</td>
</tr>
<tr>
<td>JPG1429H</td>
<td>Political Ecology of Food and Agriculture</td>
</tr>
<tr>
<td>JPG1502H</td>
<td>Global Urbanism and Cities of the Global South</td>
</tr>
<tr>
<td>JPG1503H</td>
<td>Space, Time, Revolution</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JPG1504H</td>
<td>Institutionalism and Cities: Space, Governance, Property, and Power</td>
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<tr>
<td>JPG1506H</td>
<td>State/Space/Difference: Understanding the New Social Geography of the State</td>
</tr>
<tr>
<td>JPG1507H</td>
<td>Housing Markets and Housing Policy Analysis</td>
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<tr>
<td>PL1510H</td>
<td>Special Topics in Planning</td>
</tr>
<tr>
<td>JPG1511H</td>
<td>The Commons: Geography, Planning, Politics</td>
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<tr>
<td>JPG1512H</td>
<td>Place, Politics, and the Urban</td>
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<tr>
<td>PLA1514H</td>
<td>The Role of the Planner</td>
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<tr>
<td>JPG1516H</td>
<td>Declining Cities</td>
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<tr>
<td>PLA1516H</td>
<td>Special Topics in Planning II</td>
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<tr>
<td>PLA1517H</td>
<td>Special Topics in Planning III</td>
</tr>
<tr>
<td>JPG1518H</td>
<td>Sustainability and Urban Communities</td>
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<tr>
<td>PLA1518H</td>
<td>City Building — Practice and Experience in Toronto and Other World Cities</td>
</tr>
<tr>
<td>PLA1519H</td>
<td>Planning and Governance</td>
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<tr>
<td>JPG1520H</td>
<td>Contested Geographies of Class-Race Formations</td>
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<tr>
<td>PLA1520H</td>
<td>Project Management and Conflict Resolution for Planners</td>
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<tr>
<td>PLA1525H</td>
<td>Urban, Regional, and Community Economic Development</td>
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<tr>
<td>PLA1551H</td>
<td>Policy Analysis</td>
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<td>PLA1552H</td>
<td>City Planning and Management</td>
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<tr>
<td>JPG1554H</td>
<td>Transportation and Urban Form</td>
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<tr>
<td>JPG1558H</td>
<td>The History and Geography of Cycles and Cycling</td>
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<tr>
<td>PLA1601H</td>
<td>Climate Change and Resilience: Planning and Policy</td>
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<tr>
<td>JPG1605H</td>
<td>The Post-Industrial City</td>
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<tr>
<td>JPG1607H</td>
<td>Geography of Competition</td>
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<tr>
<td>JPG1615H</td>
<td>Planning and the Social Economy</td>
</tr>
<tr>
<td>JPG1616H</td>
<td>The Cultural Economy</td>
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<tr>
<td>JPG1617H</td>
<td>Organization of Economies and Cities</td>
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<td>JPG1621H</td>
<td>Innovation and Governance</td>
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<tr>
<td>PLA1650H</td>
<td>Urban Design: History Theory Criticism</td>
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<tr>
<td>PLA1651H</td>
<td>Planning and Real Estate Development</td>
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<tr>
<td>PLA1652H</td>
<td>Introductory Studio in Urban Design and Planning</td>
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<tr>
<td>PLA1653H</td>
<td>Advanced Studio in Urban Design and Planning</td>
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<tr>
<td>PLA1654H</td>
<td>Urban Design Research Methods</td>
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<td>PLA1655H</td>
<td>Urban Design and Development Controls</td>
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<td>PLA1656H</td>
<td>Land Use Planning: Principles and Practice</td>
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<td>JPG1660H</td>
<td>Regional Dynamics</td>
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<td>JPG1670H</td>
<td>Regional Economic Analysis</td>
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<td>JPG1672H</td>
<td>Land and Justice</td>
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<td>PLA1702H</td>
<td>Pedestrians, Streets, and Public Space</td>
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<td>PLA1703H</td>
<td>Transportation Planning and Infrastructure</td>
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<td>JPG1706H</td>
<td>Violence and Security</td>
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<td>PLA1801H</td>
<td>Urban Infrastructure Planning</td>
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<tr>
<td>JPG1804H</td>
<td>Space, Power, and Geography: Understanding Spatiality</td>
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<td>JPG1805H</td>
<td>Transnationalism, Diaspora, and Gender</td>
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<td>GGR1807H</td>
<td>Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'</td>
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<td>JPG1809H</td>
<td>Spaces of Work: Value, Identity, Agency, Justice</td>
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<td>JPG1810H</td>
<td>Globalization and Postmodernism</td>
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<tr>
<td>JPG1812Y</td>
<td>Planning for Change: Community Development in Practice</td>
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<tr>
<td>JPG1813H</td>
<td>Planning and Social Policy</td>
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<tr>
<td>JPG1814H</td>
<td>Cities and Immigrants</td>
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<td>JPG1818H</td>
<td>The Geography and Planning of Climate Action and Activism</td>
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<tr>
<td>JPG1820H</td>
<td>Disability and the City</td>
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<tr>
<td>JPG1825H</td>
<td>Black Geographies of the Atlantic</td>
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<td>JPG1830H</td>
<td>Utopia/Dystopia</td>
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<tr>
<td>JPG1835H</td>
<td>Anti-Colonial Planning: Theory and Practice</td>
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<tr>
<td>JPG1906H</td>
<td>Geographic Information Systems</td>
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<td>JPG1909H</td>
<td>Advanced GIS Data Processing</td>
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<tr>
<td>JPG1914H</td>
<td>Geographic Information Systems Research Project (exclusion: GGR462H1)</td>
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<td>JPG2150H</td>
<td>Advanced Seminars in Selected Topics</td>
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<td>JPG2151H</td>
<td>Advanced Seminars in Selected Topics II</td>
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<td>PLA4444H</td>
<td>Internship (Credit/No Credit) (Designates the internship to be undertaken by master's students in the Planning program. It cannot be used to fulfill other course requirements for the degree.)</td>
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</table>
Germanic Languages and Literatures

Germanic Languages and Literatures: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Germanic Languages and Literatures

MA

- Fields:
  - German Literature, Culture and Theory;
  - Yiddish Studies

Germanic Literature, Culture and Theory

PhD

- Field:
  - Germanic Literature, Culture and Theory

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - Germanic Languages and Literatures, MA
  - Germanic Literature, Culture and Theory, PhD
- Diaspora and Transnational Studies
  - Germanic Languages and Literatures, MA
  - Germanic Literature, Culture and Theory, PhD
- Jewish Studies
  - Germanic Languages and Literatures, MA
  - Germanic Literature, Culture and Theory, PhD
- Women and Gender Studies
  - Germanic Languages and Literatures, MA
  - Germanic Literature, Culture and Theory, PhD

Overview

The Department of Germanic Languages and Literatures at the University of Toronto is the oldest and largest department of German in Canada encompassing 11 full-time faculty who contribute to a curriculum that speaks to our traditional strength in literary and intellectual history. Our faculty and students conduct research in German cinema, critical theory, language pedagogy, Yiddish studies, medieval studies, travel literature, as well as post-colonial, psychoanalytic, and transnational studies.

Past graduates have secured tenure-track teaching positions as well as employment in the arts, in cultural programming, the publishing industry, and educational administration. We are committed to providing our graduate students with exposure to a diversity of methodological approaches among our faculty and those of affiliate units. We also emphasize early progress towards professionalization through participation in faculty research projects, attendance at local and international conferences, and enrollment in campus writing workshops. We cultivate a departmental climate of mutual respect and collegiality in the shared pursuit of critical inquiry.

The department offers a graduate program of study leading to two degrees: Master of Arts and Doctor of Philosophy. The MA degree usually takes eight months (September to April) to complete, while the PhD degree is normally completed in four to five years.

Contact and Address

Web: german.utoronto.ca
Email: german@chass.utoronto.ca
Telephone: (416) 926-2321
Fax: (416) 926-2329

Department of Germanic Languages and Literatures
3rd Floor, 50 St. Joseph Street
University of Toronto
Toronto, Ontario M5S 1J4
Canada

Germanic Languages and Literatures: Graduate Faculty

Full Members

- Fenner, Angelica - BA, MA, PhD
- Goetschel, Willi - PhD
- Hager, Michael - MA, PhD
- Lehleiter, Christine - MA, PhD
- Noyes, John - BA, MA, PhD (Graduate Coordinator)
- Shternshis, Anna - MA, PhD
- Soldovieri, Stefan - BA, MA, PhD (Chair and Graduate Chair)
- Stock, Markus - MA, PhD
- Zilcosky, John - BA, MA, PhD

Members Emeriti

- Dierick, Augustinus - BA, MA, PhD
- Hempel, Wolfgang - PhD
- Mayer, Hartwig - PhD, PhD
- Saas, Christa - BA, MA, PhD
- Seliger, Helfried - PhD
Germanic Languages and Literatures:
Germanic Languages and Literatures MA

Master of Arts

Program Description

The MA degree in Germanic Languages and Literatures is offered in two fields:

- German Literature, Culture and Theory
- Yiddish Studies

The course-based, one-year MA program normally spans two sessions. Students have the option to concurrently enrol in one of the collaborative specializations at U of T, such as Women and Gender Studies, Jewish Studies, Transnational and Diaspora Studies, or Book History and Print Culture. This also requires registration in their respective core course(s). The MA in German is a full-time program, but may also be taken part-time under extenuating circumstances. Graduates may continue on to doctoral studies as well as embarking on careers in translation, language teaching, literary editing, cultural programming, and corporate and administrative positions requiring advanced communication and analytical skills.

Field: German Literature, Culture and Theory

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Germanic Languages and Literatures' additional admission requirements stated below.

Program Requirements

- **Coursework.** Students must successfully complete a total of 3.5 full-course equivalents (FCEs) including:
  - GER1000H German Studies Seminar: Culture, Theory, Text (0.5 FCE)
  - at least 1.5 FCEs of the remaining 3.0 FCEs must carry a GER designator
  - the remaining course selection which is made in consultation with the Associate Chair of Graduate Studies of the department and must be approved by the department.

- Pass a **German language competence test** at the beginning of the program. Only one attempt is permitted.

Program Length

2 sessions full-time (typical registration sequence: F/W);
5 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Field: Yiddish Studies

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Germanic Languages and Literatures' additional admission requirements stated below.

- Applicants to the one-year MA program in the field of Yiddish Studies must have completed an appropriate bachelor's degree from a recognized university that includes at least 2.0 full-course equivalents (FCEs) in Yiddish language and culture, with an average grade of at least a B+

- Applicants should arrange for two supporting letters to be sent to the Associate Chair of Graduate Studies of the department, preferably on forms available from the department.

- Admission is based upon the applicant's academic record as evidenced through transcripts from all post-secondary institutions, the supporting letters, a sample of written work (such as a term paper), and a Letter of Intent (500-word maximum) identifying current career goals and areas of academic interest.
Program Requirements

- **Coursework.** Students must successfully complete a total of 3.5 full-course equivalents (FCEs) including:
  - GER1000H German Studies Seminar: Culture, Theory, Text (0.5 FCE)
  - CJS1000H Core Methods Seminar in Jewish Studies (0.5 FCE)
  - GER1050H Methods and Texts in Yiddish Studies (0.5 FCE)
  - GER2050Y Research Paper in Yiddish Studies (1.0 FCE)
  - the remaining elective courses (1.0 FCE) selected from a course list approved by the department.
- Pass a **Yiddish language competency test** at the beginning of the program. Only one attempt is permitted.

Program Length

- 2 sessions full-time (typical registration sequence: F/W);
- 5 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time

Germanic Languages and Literatures: 
Germanic Literature, Culture and Theory 
PhD

Doctor of Philosophy

Program Description

The PhD program in Germanic Literature, Culture, and Theory is taken on a full-time basis and is fully funded for five years. The curriculum engages debates and questions salient to the discipline of German Studies while also forging generative ties with other disciplines to facilitate a synthesis of history and theory, textual analysis, and cultural study. Students have the option to concurrently enrol in one of the collaborative specializations at U of T, such as Women and Gender Studies, Jewish Studies, Transnational and Diaspora Studies, or Book History and Print Culture. This also requires registration in their respective core course(s).

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master's degree or 2) direct entry following completion of an appropriate bachelor's degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Germanic Languages and Literatures' additional admission requirements stated below.
- Admission to the PhD program requires an appropriate master's degree in German from a recognized university, with an average grade equivalent to at least a University of Toronto A– in the applicant's overall program.
- Applicants must satisfy the department that they are capable of independent research in German at an advanced level.
- Applicants should arrange for three supporting letters to be sent to the Associate Chair of Graduate Studies of the department, preferably on forms available from the department.
- Admission is based upon the applicant's academic record, a writing sample, a Letter of Intent (500-word maximum), and the evidence of the supporting letters.

Program Requirements

- **Coursework.** Applicants admitted on the basis of a master's degree must take a minimum of 4.0 full-course equivalents (FCEs) including:
  - GER1000H German Studies Seminar: Culture, Theory, Text (0.5 FCE) with an average grade of at least an A–.
  - At least 3.5 FCEs by the end of Year 1.
  - Any remaining courses required for the degree by the end of Year 2. Course selection may include 1.5 FCEs in a department other than Germanic Languages and Literatures.
  - Course selection is made in consultation with the Associate Chair of Graduate Studies of the department and must be approved by the department.
- Students must provide evidence of reading knowledge of French or, in exceptional circumstances, of another language approved by the department.
- Students must pass a qualifying examination with written and oral components in the second session of Year 2 of the PhD program. The qualifying examination has two components:
  - The proficiency exam is based on a student-created and committee-approved, comprehensive list of works and entails writing exams in four (4) epochs (three for the Yiddish field), followed by an oral exam.
  - The research field paper on a topic approved by the examination committee offers a means to explore key theoretical readings and test firsthand the traction of at least one central methodology pertinent to the future thesis. This paper, between 25 and 30 pages in length, is completed during the Summer session following the proficiency examination and strives towards publishable quality.
  - The thesis proposal encompasses an abstract, literature review, detailed discussion of the methodology, tentative chapter outlines, and bibliography/mediography.
- Students must pass a thesis proposal review under the guidance of their supervisory committee, whose members will read the proposal, and approve the examinee for doctoral candidacy.
Students must deliver a departmental lecture on their dissertation topic within one year following the thesis proposal review.

Students must submit the doctoral thesis and successfully complete the Final Oral Examination.

The department may permit a candidate to write the doctoral thesis in German when the candidate's advisory committee so recommends and when the candidate has satisfied the School of Graduate Studies' conditions (see 12.1.2.8 Thesis section in Degree Regulations, Doctor of Philosophy).

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Germanic Languages and Literatures' additional admission requirements stated below.
- Admission to the PhD program requires an appropriate bachelor's degree from a recognized university that includes at least 6.0 full-course equivalents (FCEs) in German language, literature, and culture, with an average grade equivalent to at least a University of Toronto B+ in the applicant's overall program and of at least an A– in the applicant's German courses.
- Applicants must satisfy the department that they are capable of independent research in German at an advanced level.
- Applicants should arrange for three supporting letters to be sent to the Associate Chair of Graduate Studies of the department, preferably on forms available from the department.
- Admission is based upon the applicant's academic record, a writing sample, a Letter of Intent (500-word maximum), and the evidence of the supporting letters.

Program Requirements

- Coursework. Applicants admitted on the basis of a bachelor's degree must take a minimum of 7.0 full-course equivalents (FCEs), including:
  - GER1000H German Studies Seminar: Culture, Theory, Text (0.5 FCE) with an average grade of at least an A–.
  - The department may recommend to the School of Graduate Studies the termination of the registration and eligibility of a student who fails to complete at least 3.5 FCEs, with an average of at least an A–, during Year 1.
  - The remaining courses required for the degree, with an A– average, by the end of Year 2.
- Students must provide evidence of reading knowledge of French or, in exceptional circumstances, of another language approved by the department.
- Students must pass a qualifying examination with written and oral components in the second session of Year 3 of the PhD program. The qualifying examination has two components:
  - The proficiency exam is based on a student-created and committee-approved, comprehensive list of works and entails writing exams in four (4) epochs (three for the Yiddish field), followed by an oral exam.
  - The research field paper on an approved topic approved by the examination committee offers a means to explore key theoretical readings and test firsthand the traction of at least one central methodology pertinent to the future thesis. This paper, between 25 and 30 pages in length, is completed during the Summer session following the proficiency examination and strives towards publishable quality.
- The thesis proposal encompasses an abstract, literature review, detailed discussion of the methodology, tentative chapter outlines, and bibliography/mediagraphy.
- Students must pass a thesis proposal review under the guidance of their supervisory committee, whose members will read the proposal and approve the examinee for doctoral candidacy.
- Students must deliver a departmental lecture on their dissertation topic within one year following the thesis proposal review.
- Students must submit the doctoral thesis and successfully complete the Final Oral Examination.
- The department may permit a candidate to write the doctoral thesis in German when the candidate's advisory committee so recommends and when the candidate has satisfied the School of Graduate Studies' conditions (see 12.1.2.8 Thesis section in Degree Regulations, Doctor of Philosophy).

Program Length

5 years

Time Limit

7 years

Germanic Languages and Literatures: Germanic Languages and Literatures MA and Germanic Literature, Culture and Theory PhD Courses

Not all courses are offered every year. The department should be consulted each session as to actual course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GER1000H</td>
<td>German Studies Seminar: Culture, Theory, Text</td>
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<tr>
<td>GER1050H</td>
<td>Methods and Texts in Yiddish Studies</td>
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<td>Course Code</td>
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<tr>
<td>GER1051Y</td>
<td>Yiddish Language and Literature for German Speakers</td>
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<tr>
<td>GER1200H</td>
<td>Middle High German</td>
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<td>GER1210H</td>
<td>Medieval German Romance: Tristan und Isolde</td>
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<tr>
<td>GER1220H</td>
<td>Medieval Arthurian Romance</td>
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<td>GER1480H</td>
<td>Goethe's Faust</td>
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<td>GER1485H</td>
<td>Goethe's Novels</td>
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<tr>
<td>GER1490H</td>
<td>Topics in German Literary Studies</td>
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<tr>
<td>GER1540H</td>
<td>Revolutions</td>
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<td>GER1550H</td>
<td>Origins: Myths of Beginning in German Literature and Thought</td>
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<tr>
<td>GER1661H</td>
<td>Modernism in Context</td>
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<td>GER1690H</td>
<td>Theatre in the Weimar Republic</td>
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<td>GER1722H</td>
<td>Kafka</td>
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<tr>
<td>GER1730H</td>
<td>Travel Writing</td>
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<td>GER1770H</td>
<td>Reviewing the 50s: German Cinemas under Reconstruction</td>
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<td>GER1771H</td>
<td>Topics in German Cinema Studies</td>
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<td>GER1775H</td>
<td>Cinemas of Migration</td>
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<td>GER1780H</td>
<td>Topics in German Visual Culture</td>
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<td>GER1785H</td>
<td>Remaking the Movies in German Cinemas</td>
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<td>GER1820H</td>
<td>The Learning and Teaching of German</td>
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<td>GER1821H</td>
<td>Reading Course in Second Language Acquisition</td>
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<td>GER1860H</td>
<td>Introduction to Critical Theory</td>
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<td>GER1880H</td>
<td>Gottfried Keller and the Politics of Poetic Realism in a Minor Key</td>
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<td>GER2000H,Y</td>
<td>Reading Course in Approved Field</td>
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<td>GER2050Y</td>
<td>Research Paper in Yiddish Studies</td>
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<tr>
<td>GER2051H</td>
<td>Topics in Yiddish or German-Jewish Studies</td>
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<tr>
<td>GER6000H</td>
<td>Reading German for Graduate Students</td>
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<tr>
<td>JGC1660H</td>
<td>Modernism and the Other</td>
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<td>JGC1740H</td>
<td>Humans and Things</td>
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<td>JGC1855H</td>
<td>Critical Theory in Context: The French-German Connection</td>
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<tr>
<td>JGF1733H</td>
<td>Autobiographical Documentary: History, Alterity, and Performativity</td>
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</table>
Global Affairs and Public Policy

Global Affairs and Public Policy: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Global Affairs

MGA

- Emphases:
  - Development;
  - Global Justice and Human Rights;
  - Global Policy and Asia;
  - Global Policy in Europe and Eurasia;
  - Global Security;
  - Innovation Policy;
  - Markets;
  - The Digital World
- Dual Degree Programs:
  - MGA (University of Toronto) / MIA (Hertie School, Berlin);
  - MGA (University of Toronto) / MPA (London School of Economics, London);
  - MGA (University of Toronto) / MPP (Sciences Po, Paris)

Public Policy

MPP

- Emphases:
  - Economics for Public Policy;
  - Public and Non-Profit Management and Administration;
  - Social and Urban Policy

Combined Degree Programs

- STG, Law, JD / MGA
- STG, Law, JD / MPP
- STG, Management, MBA / MGA

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environmental Studies
  - Global Affairs, MGA
  - Public Policy, MPP
- Ethnic, Immigration and Pluralism Studies
  - Global Affairs, MGA
  - Public Policy, MPP
- Public Health Policy
  - Public Policy, MPP
- Sexual Diversity Studies
  - Public Policy, MPP

Overview

The Master of Global Affairs (MGA) program is a two-year professional program that equips students with a sophisticated understanding of the larger political, economic, and social contexts of global affairs and with the skills necessary to work strategically and effectively within the evolving global system. Focused on five pillars of Global Security, Global Development, Global Justice and Human Rights, Global Markets, and Innovation Policy, students will gain the tools needed to have a real-world impact.

The Munk School's prestigious Master of Public Policy (MPP) brings together an impressive array of students and faculty for a two-year, full time program that bridges Canadian and global policy. In addition to a paid summer internship and a wide range of career support services, students develop core competencies considered essential for policy practice and take electives from both within the Munk School and in the broader University. Visiting public sector leaders along with a renowned multidisciplinary faculty bridge theory and real-world experience, providing contact with senior professionals in government and the broader public, private, and community sectors. Students may also apply to the combined JD/MPP degree program as well as pursue collaborative specializations with other graduate departments.

A Munk School education, located in the heart of downtown Toronto and in close proximity to an extraordinary concentration of policy leaders, will empower students to achieve their professional and personal goals.

Contact and Address

Web: munkschool.utoronto.ca/mga
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Telephone: (416) 946-8917
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Munk School of Global Affairs and Public Policy
University of Toronto
315 Bloor Street West
Toronto, Ontario M5S 0A7
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Master of Public Policy Program
University of Toronto
Canadiiana Gallery
Global Affairs and Public Policy: Global Affairs MGA

Master of Global Affairs

Program Description

The Master of Global Affairs (MGA) is a two-year professional program, consisting of four sessions of coursework and a compulsory summer internship. The purpose of this program is to provide an outstanding professional, multidisciplinary education to train the next generation of global leaders of international institutions, global civil society, and business. This program is open to applicants from all disciplinary backgrounds.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Munk School of Global Affairs and Public Policy's additional admission requirements stated below.
- An appropriate bachelor's degree with a minimum standing in the final year equivalent to at least a University of Toronto B+.

Program Requirements

This is a two-year program taken on a full-time basis over 20 consecutive months. Students must successfully complete a total of 8.5 full-course equivalents (FCEs) as follows.

**Year 1:**
- 3.5 FCEs in core courses (seven half courses).
- 1.0 FCE in elective courses. Of these, 0.5 FCE must be chosen from the following: GLA2027H Ethics and Global Affairs, GLA2029H Sustainability in the World: A Living Lab Course, or GLA2034H Decision Making and Strategic Thinking.
- At the end of Year 1, students must declare an emphasis as part of their degree program. They must complete 1.5 FCEs of coursework in order to successfully complete the emphasis; see details on the emphases below.

**Summer session between Years 1 and 2:**
- GLA1007H Global Internship (0.5 FCE).

**Year 2:**
- 1.0 FCE in core courses: GLA2000H Capstone Seminar and GLA2111H Research Methods for Global Affairs.
- Additional 2.5 elective FCEs (five half courses) at the 2000 level from the Munk School. A maximum of 1.0 FCE may be taken from graduate programs outside the Munk School.
Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Emphasis: Development

MGA students who wish to complete an emphasis in Development must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2002H; GLA2014H; GLA2019H; GLA2028H; GLA2060H; GLA2061H; GLA2062H; JCR1000Y.

Emphasis: Global Justice and Human Rights

MGA students who wish to complete an emphasis in Global Justice and Human Rights must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2013H; GLA2023H; GLA2066H; GLA2067H; GLA2068H.

Emphasis: Global Policy and Asia

MGA students who wish to complete an emphasis in Global Policy and Asia must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2003H; GLA2036H; GLA2044H; GLA2045H; GLA2046H.

Emphasis: Global Policy in Europe and Eurasia

MGA students who wish to complete an emphasis in Global Policy in Europe and Eurasia must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

ERE1161H; ERE1170H; ERE1175H; ERE1179H; GLA2015H; GLA2056H; GLA2068H.

Emphasis: Global Security

MGA students who wish to complete an emphasis in Global Security must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2010H; GLA2024H; GLA2030H; GLA2063H; GLA2064H; GLA2065H.

Emphasis: Innovation Policy

MGA students who wish to complete an emphasis in Innovation Policy must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2014H; GLA2018H; GLA2021H; GLA2080H; GLA2081H; GLA2082H.

Emphasis: Markets

MGA students who wish to complete an emphasis in Markets must successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2001H; GLA2006H; GLA2012H; GLA2015H; GLA2025H; GLA2037H; GLA2069H; GLA2070H; GLA2071H.

Emphasis: The Digital World

MGA students who wish to complete an emphasis in The Digital World successfully complete 1.5 full-course equivalents (FCEs) from the following list:

GLA2010; GLA2024H; GLA2041H; GLA2042H; GLA2043H; GLA2052H.

Global Affairs and Public Policy: Global Affairs MGA (Dual Degree: MGA / MIA Hertie School of Governance)

Dual Degree Program: Master of Global Affairs (University of Toronto) / Master of International Affairs (Hertie School of Governance)

Program Description

This dual degree program creates a pathway between the U of T Master of Global Affairs and the Hertie School Master of International Affairs (MIA) programs. In Year 1, students complete MIA coursework at the Hertie School of Governance in Berlin, Germany. In the Summer session of Year 1, students complete an internship that is part of the MGA and MIA degree programs. In Year 2, students complete MGA coursework in Toronto and in the final Summer session, complete a master's thesis as part of the dual degree requirements.
Students will gain both degrees in two years (24 months) rather than the four years it would take to acquire the degrees consecutively. The pattern of registration is F/W/S/F/W/S with students completing both programs in August of Year 2. This dual degree program is open to applicants from all disciplinary backgrounds.

Contact

Master of Global Affairs / Master of International Affairs Program
Web: munkschool.utoronto.ca/mga/dual-degree-with-the-hertie-school

Master of Global Affairs Program
Munk School of Global Affairs and Public Policy, University of Toronto
Email: mga@utoronto.ca

Master of International Affairs Program
Hertie School of Governance
Email: grad-admissions@hertie-school.org

Application Process

- Applicants must apply through the Hertie School admissions website. Applicants are then jointly selected and admitted by the MGA at the University of Toronto and the MIA at the Hertie School. All applicants must complete the Hertie School online admissions application.
- All applicants who are admitted to the dual degree program must then also complete the application on U of T’s School of Graduate Studies online admissions application system.

Minimum Admission Requirements

- Applicants must meet the admission requirements of both programs to be admitted to the dual degree. The MGA admission requirements are stated below.
- Applicants are admitted under the General Regulations of the School of Graduate Studies of the University of Toronto as well as the specific requirements of the MGA.
- An appropriate bachelor's degree with a standing in the final year equivalent to at least a U of T B+.
- Applicants whose primary language is not English and who graduated from a university where the primary language of instruction is not English must provide proof of English-language proficiency. The following tests and scores will be accepted:
  - Test of English as a Foreign Language (TOEFL): 100/120 overall;
  - International English Language Testing System (IELTS): 7, with at least 6.0 for each component.

Program Requirements

During their U of T registration in the MGA program, students must successfully complete a total of 6.5 full-course equivalents (FCEs) as follows.

Year 1

- **Fall and Winter:** Students complete Year 1 courses at the Hertie School.
- **Summer:** GLA1007H Global Internship (0.5 FCE, 12 weeks) plus a critical reflection paper to be submitted in September of Year 2.

Year 2

- **Fall and Winter (5.0 FCEs):**
  - GLA1011H Global Innovation Policy (0.5 FCE).
  - GLA1014H Global Development (0.5 FCE).
  - GLA2000H Capstone Seminar (0.5 FCE).
  - GLA2111H Research Methods for Global Affairs (0.5 FCE).
  - GLA2887H Final Research and Analysis (Credit/No Credit; 0.5 FCE).
  - 2.5 elective FCEs (five half courses) at the 2000 level within the MGA program.
- **Summer (1.0 FCE):** GLA2889Y Dual Degree Master's Thesis (Credit/No Credit).

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Global Affairs and Public Policy: Global Affairs MGA (Dual Degree: MGA / MPA London School of Economics)

Dual Degree Program: Master of Global Affairs (University of Toronto) / Master of Public Administration (London School of Economics)

Program Description

This dual degree program creates a pathway between the U of T Master of Global Affairs (MGA) and the London School of Economics Master of Public Administration (MPA) programs. In Year 1, students complete MPA coursework at the London School of Economics and Public Policy in the United Kingdom. In the Summer session of Year 1, students complete an internship that is part of the MGA program. In Year 2, students complete MGA coursework in Toronto and in the final Summer session, complete a policy paper as part of the dual degree requirements.

Students will gain both degrees in two years (21 months) rather than the four years it would take to acquire the degrees consecutively. The pattern of registration is F/W/S/F/W/S with students completing both programs by the end of June in Year 2. This dual degree program is open to applicants from all disciplinary backgrounds.
Contact

Master of Global Affairs / Master of Public Administration Program
Web: munkschool.utoronto.ca/mga/joint-degrees

Master of Global Affairs Program
Munk School of Global Affairs and Public Policy, University of Toronto
Email: mga@utoronto.ca

Master of Public Administration Program
School of Public Policy, London School of Economics and Political Science
Email: mpa@lse.ac.uk

Application Process

- Applicants must apply through the London School of Economics and Political Science admissions website. Applicants are then jointly selected and admitted by the MGA at U of T and the MPA at the London School of Economics. All applicants must complete the London School of Economics online admissions application.
- All applicants who are admitted to the dual degree program must then also complete an application on the U of T School of Graduate Studies online admissions application system.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the dual degree program’s additional admission requirements stated below.
- An appropriate bachelor's degree with a standing in the final year equivalent to at least a University of Toronto B+, and a cumulative standing equivalent to at least a University of Toronto mid-B.
- Applicants whose primary language is not English and who graduated from a university where the primary language of instruction is not English must provide proof of English-language proficiency. The following tests and scores will be accepted:
  - Test of English as a Foreign Language (TOEFL) Internet-Based Test (iBT): 100/120 overall;
  - International English Language Testing System (IELTS): 7, with at least 6.5 for each component.

Program Requirements

During their U of T registration in the MGA program, students must successfully complete a total of 6.5 full-course equivalents (FCEs).

Year 1

- **Fall and Winter**: Students complete Year 1 courses at the London School of Economics.
- **Summer (0.5 FCE)**: GLA1007H Global Internship (10 to 16 weeks) plus a critical reflection paper to be submitted in September of Year 2.

Year 2

- **Fall and Winter (5.0 FCEs)**:
  - GLA1006H International Legal Challenges (0.5 FCE).
  - GLA1011H Global Innovation Policy (0.5 FCE).
  - GLA2000H Capstone Seminar (0.5 FCE).
  - GLA2111H Research Methods for Global Affairs I (0.5 FCE).
  - GLA2887H Final Research and Analysis (Credit/No Credit; 0.5 FCE).
  - 2.5 elective FCEs (five half courses) at the 2000 level within the MGA program.
- **Summer (1.0 FCE)**:
  - GLA2890Y Policy Paper.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Global Affairs and Public Policy: Global Affairs MGA (Dual Degree: MGA / MPP Sciences Po)

Dual Degree Program: Master of Global Affairs (University of Toronto) / Master of Public Policy (Sciences Po)

Program Description

This dual degree program creates a pathway between the U of T Master of Global Affairs (MGA) and the Sciences Po Master of Public Policy (MPP) programs. In Year 1, students complete MPP coursework at Sciences Po in Paris, France. In the Summer session of Year 1, students complete an internship that is part of the MGA degree program. In Year 2, students complete MGA coursework in Toronto and in the final Summer session, complete a Grand Oral Exam as part of the dual degree requirements.

Students will gain both degrees in two years (24 months) rather than the four years it would take to acquire the degrees consecutively. The pattern of registration is F/W/S/F/W/S with students completing both programs in August of Year 2. This dual degree program is open to applicants from all disciplinary backgrounds.

Contact

Master of Global Affairs / Master of Public Policy Program
Web: munkschool.utoronto.ca/mga/joint-degrees/dual-degree-sciences-po-school-public-affairs-paris

Master of Global Affairs Program
Munk School of Global Affairs and Public Policy, University of Toronto
Email: mga@utoronto.ca
Application Process

- Applicants must apply through the Sciences Po admissions website. Applicants are then jointly selected and admitted by the MGA at the University of Toronto and the MPP at Sciences Po. All applicants must complete the Sciences Po online admissions application.
- All applicants who are admitted to the dual degree program must then also complete the application on U of T’s School of Graduate Studies online admissions application system.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies of the University of Toronto. Applicants must also satisfy the dual degree program's additional admission requirements stated below.
- An appropriate bachelor’s degree with a standing in the final year equivalent to at least a U of T B+, and a cumulative standing equivalent to at least a U of T mid-B.
- Applicants whose primary language is not English and who graduated from a university where the primary language of instruction is not English must provide proof of English-language proficiency. The following tests and scores will be accepted:
  - Test of English as a Foreign Language (TOEFL): 100/120 overall;
  - International English language Testing System (IELTS): 7, with at least 6.5 for each component.
- Proof of French-language proficiency is also necessary if the French track is chosen at Sciences Po. Please consult the Sciences Po website for details.

Program Requirements

During their U of T registration in the MGA program, students must successfully complete a total of 6.0 full-course equivalents (FCEs) as follows.

Year 1

- **Fall and Winter**: Students complete Year 1 courses at Sciences Po.
- **Summer (0.5 FCE)**: GLA1007H Global Internship (12 weeks) plus a critical reflection paper to be submitted in September of Year 2.

Year 2

- **Fall and Winter (5.0 FCEs)**:
  - GLA1001H Macroeconomics: Markets, Institutions, and Growth (0.5 FCE).
  - GLA1003H Global Security (0.5 FCE).
  - GLA1006H International Legal Challenges (0.5 FCE).
  - GLA1011H Global Innovation Policy (0.5 FCE).
  - GLA1012H Global Development (0.5 FCE).
  - GLA2000H Capstone Seminar (0.5 FCE).
  - GLA2111H Research Methods for Global Affairs (0.5 FCE).
  - GLA2887H Final Research and Analysis (Credit/No Credit; 0.5 FCE).
  - 1.0 elective FCE (two half courses) at the 2000 level, taken at the Munk School.
- **Summer (0.5 FCE)**: GLA2800H Grand Oral.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Global Affairs and Public Policy: Global Affairs MGA Courses

### Year 1

**Core Courses (Required)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
<td>GLA1001H</td>
<td>Macroeconomics: Markets, Institutions, and Growth</td>
</tr>
<tr>
<td>GLA1003H</td>
<td>Global Security</td>
</tr>
<tr>
<td>GLA1006H</td>
<td>International Legal Challenges</td>
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<tr>
<td>GLA1010H</td>
<td>Microeconomics for Global Affairs</td>
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<td>GLA1011H</td>
<td>Global Innovation Policy</td>
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<tr>
<td>GLA1012H</td>
<td>Statistics for Global Affairs</td>
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<tr>
<td>GLA1014H</td>
<td>Global Development</td>
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**Summer Course (Required)**

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<tr>
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<tr>
<td>GLA1007H</td>
<td>Global Internship</td>
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### Year 2

**Core Courses (Required)**

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<tr>
<th>Course Code</th>
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<tr>
<td>GLA2000H</td>
<td>Capstone Seminar</td>
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<tr>
<td>GLA2111H</td>
<td>Research Methods for Global Affairs</td>
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<tr>
<td>GLA2800H</td>
<td>Grand Oral</td>
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<tr>
<td>GLA2887H</td>
<td>Final Research and Analysis</td>
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<tr>
<td>GLA2889Y</td>
<td>Dual Degree Master's Thesis</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>GLA2890Y</td>
<td>Policy Paper (Required for students in the MGA/MPA dual degree program. Prerequisite: GLA2887H.)</td>
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### Elective Courses (Subject to Change)

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>GLA1013H</td>
<td>Logic of Global Inquiry</td>
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<tr>
<td>GLA2001H</td>
<td>Global Capital Markets and Global Strategies</td>
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<tr>
<td>GLA2002H</td>
<td>Issues in Development Policy and Practice</td>
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<tr>
<td>GLA2003H</td>
<td>Governing With or Without the State</td>
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<td>GLA2005H</td>
<td>Negotiating Internationally</td>
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<tr>
<td>GLA2006H</td>
<td>The Global Political Economy of Finance and Investment</td>
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<tr>
<td>GLA2007H</td>
<td>Global Affairs Externship (Credit/No Credit)</td>
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<tr>
<td>GLA2010H</td>
<td>Geopolitics of Cyberspace</td>
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<tr>
<td>GLA2012H</td>
<td>The Global Political Economy of Trade</td>
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<tr>
<td>GLA2013H</td>
<td>Topics in Global Violence</td>
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<td>GLA2014H</td>
<td>Innovation and Economic Development</td>
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<td>GLA2015H</td>
<td>The Political Economy of the Welfare State</td>
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<td>GLA2018H</td>
<td>Innovation and the City</td>
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<td>GLA2019H</td>
<td>The Political Economy of Development</td>
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<td>GLA2021H</td>
<td>Innovation, Institutions, Governments, and Growth</td>
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<td>GLA2022H</td>
<td>Global Institutions and Diplomacy</td>
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<td>GLA2023H</td>
<td>Justice Reforms in Global Context</td>
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<td>GLA2024H</td>
<td>Intelligence and Cybersecurity in Global Politics</td>
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<td>GLA2025H</td>
<td>Global Affairs Lab</td>
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<td>GLA2027H</td>
<td>Ethics and Global Affairs</td>
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<td>GLA2028H</td>
<td>Global Civil Society</td>
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<td>GLA2029H</td>
<td>Sustainability in the World: A Living Lab Course</td>
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<td>GLA2030H</td>
<td>Grand Strategy and Global Threats</td>
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<tr>
<td>GLA2034H</td>
<td>Decision Making and Strategic Thinking</td>
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<tr>
<td>GLA2036H</td>
<td>Bilateral Diplomacy: Canada-Japan and US-Japan Relations</td>
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<tr>
<td>GLA2037H</td>
<td>Financial Management for Global Organizations</td>
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<tr>
<td>GLA2041H</td>
<td>Topics in the Digital World I</td>
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<td>GLA2042H</td>
<td>Topics in the Digital World II</td>
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<td>GLA2043H</td>
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<td>GLA2044H</td>
<td>Topics in Global Policy and Asia I</td>
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<td>GLA2045H</td>
<td>Topics in Global Policy and Asia II</td>
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<td>GLA2046H</td>
<td>Topics in Global Policy and Asia III</td>
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<td>GLA2050H</td>
<td>Selected Topics in International Studies</td>
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<td>GLA2052H</td>
<td>The Digital Platform Economy</td>
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<td>GLA2056H</td>
<td>The Populist Radical Right</td>
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<td>GLA2060H</td>
<td>Topics in Development I</td>
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<td>GLA2061H</td>
<td>Topics in Development II</td>
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<td>GLA2062H</td>
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<td>GLA2063H</td>
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<td>GLA2065H</td>
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<td>GLA2066H</td>
<td>Topics in Justice I</td>
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<td>GLA2067H</td>
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<td>GLA2068H</td>
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<td>GLA2069H</td>
<td>Topics in Markets I</td>
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<td>GLA2070H</td>
<td>Topics in Markets II</td>
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<td>GLA2071H</td>
<td>Topics in Markets III</td>
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<td>GLA2080H</td>
<td>Topics in Innovation I</td>
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<td>GLA2081H</td>
<td>Topics in Innovation II</td>
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<td>GLA2082H</td>
<td>Topics in Innovation III</td>
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<td>GLA2090H</td>
<td>Topics in Global Affairs I</td>
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<td>GLA2091H</td>
<td>Topics in Global Affairs II</td>
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<td>GLA2092H</td>
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<td>GLA2093H</td>
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<td>GLA2095H</td>
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<td>GLA2096H</td>
<td>Topics in Global Affairs V</td>
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<td>GLA2097H</td>
<td>Topics in Global Affairs VI</td>
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<td>GLA2098H</td>
<td>Topics in Global Affairs VII</td>
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<td>GLA2099H</td>
<td>Intensive Course in Innovation Policy I</td>
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<td>GLA2556H</td>
<td>Intensive Course in Innovation Policy II</td>
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<td>GLA2888H</td>
<td>MGA Research Paper</td>
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<td>JCR1000Y</td>
<td>An Interdisciplinary Approach to Addressing Global Challenges</td>
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<tr>
<td>JMG2020H</td>
<td>Big Data</td>
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<tr>
<td>JSE1708H</td>
<td>Sustainability and the Western Mind</td>
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</tbody>
</table>
Global Affairs and Public Policy: Public Policy MPP

Master of Public Policy

Program Description

The Munk School’s prestigious Master of Public Policy (MPP) brings together an impressive array of students and faculty for a two-year, full time program that bridges Canadian and global policy.

In addition to a paid summer internship and a wide range of career support services, students develop core competencies considered essential for policy practice and take electives from both within the Munk School and in the broader University.

Visiting public sector leaders along with a renowned multidisciplinary faculty bridge theory and real-world experience, providing contact with senior professionals in government and the broader public, private, and community sectors.

Students may also apply to the combined degree program Juris Doctor (JD) / Master of Public Policy (MPP) as well as pursue collaborative specializations with other graduate departments. A Munk School education, located in the heart of downtown Toronto and in close proximity to an extraordinary concentration of policy leaders, will empower students to achieve their professional and personal goals.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the School of Public Policy and Governance’s additional admission requirements stated below.
- A four-year bachelor's degree (or equivalent as recognized by the University of Toronto).
- A minimum cumulative grade point average (CGPA) of a B and a minimum GPA of a B+ standing in the final year of undergraduate studies (3.3 out of a possible 4.0 grading scale). Admissions selection to the MPP program is competitive and meeting this minimum requirement does not guarantee admission. Final-year grades are based on the last 5.0 full-course equivalents (FCEs) or 10.0 half-course equivalents.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- International applicants must submit a Graduate Record Examination (GRE) (general) score.
- International applicants must also submit a translation of transcripts from non-English speaking universities.
- The Munk School offers an in-depth Math and Statistics Prep course for students prior to starting Year 1 of the MPP. Details regarding the prep course are available to incoming students in the summer before Year 1. While participation is voluntary, students are encouraged to attend. All incoming students are required to complete the Math-Stats diagnostic.

Program Requirements

- **Coursework.** Students must successfully complete a total of **8.0 full-course equivalents (FCEs)** as follows:
  - **Year 1:**
    - 3.5 required FCEs: PPG1000H, PPG10002H, PPG1003H, PPG1004H, PPG1005H, PPG1007H, and PPG1008H.
      - Students must complete the Math-Stats diagnostic at the start of the Fall session.
      - Students who do not pass PPG1002H, PPG1004H, and/or PPG1008H must retake the Math-Stats diagnostic with a grade of at least 60%.
    - 0.5 elective FCE: either GLA2029H or GLA2034H.
  - **Summer** between Year 1 and Year 2, or during Year 2:
    - PPG2006Y MPP Internship. The internship research report is graded on a Credit/No Credit basis.
  - **Year 2:**
    - 1.5 required FCEs: PPG2000H, PPG2002H, and PPG2003H.
    - 0.5 elective FCE: either PPG2011H or PPG2022H.
    - 0.5 elective FCE: either PPG2008H or an alternate international/global focus course as approved by the MPP program director.
    - 1.5 elective FCEs: one elective must be a PPG course; the remaining courses may be taken with other graduate units.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Emphasis: Economics for Public Policy

MPP students who wish to complete the emphasis in Economics for Public Policy must successfully complete **1.5 full-course equivalents (FCEs)** from the following list:

GLA2001H, GLA2097H, JMG2020H, PPG2010H, PPG2013H, or other approved elective courses in the area.

Emphasis: Public and Non-Profit Management and Administration

MPP students who wish to complete the emphasis in Public and Non-Profit Management and Administration must successfully complete **1.5 full-course equivalents (FCEs)** from the following list:

**Emphasis: Social and Urban Policy**

MPP students who wish to complete the emphasis in Social and Urban Policy must successfully complete **1.5 full-course equivalents (FCEs)** from the following list:

PPG2013H, PPG2017H, PPG2021H, CHL5300H, CHL5308H, HAD5778H, LAW7030H, SWK4803H, or other approved elective courses in the area.

**Global Affairs and Public Policy: Public Policy MPP Courses**

**Course List**

**Required Core Courses**

**MPP1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG1000H</td>
<td>Governance, Institutions, and Public Policy</td>
</tr>
<tr>
<td>PPG1002H</td>
<td>Microeconomics for Policy Analysis (Students who do not pass PPG1002H must retake the Math-Stats diagnostic with a grade of at least 60%)</td>
</tr>
<tr>
<td>PPG1003H</td>
<td>Macroeconomics for Policy Analysis</td>
</tr>
<tr>
<td>PPG1004H</td>
<td>Quantitative Methods for Policy Analysis (Students who do not pass PPG1004H must retake the Math-Stats diagnostic with a grade of at least 60%)</td>
</tr>
<tr>
<td>PPG1005H</td>
<td>The Social Context of Policy-Making</td>
</tr>
<tr>
<td>PPG1007H</td>
<td>Strategic Policy Implementation</td>
</tr>
<tr>
<td>PPG1008H</td>
<td>Program Evaluation for Public Policy (Prerequisite: PPG1004H; students who do not pass PPG1008H must retake the Math-Stats diagnostic with a grade of at least 60%)</td>
</tr>
</tbody>
</table>

Choose one of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLA2029H</td>
<td>Sustainability in the World: A Living Lab Course</td>
</tr>
<tr>
<td>GLA2034H</td>
<td>Decision Making and Strategic Thinking</td>
</tr>
</tbody>
</table>

**MPP2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG2000H</td>
<td>Politics and the Policy Process</td>
</tr>
<tr>
<td>PPG2002H</td>
<td>Topics in Applied Economics for Public Policy (Prerequisite: PPG1002H and successful completion of at least 3.5 FCEs in MPP1 courses)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG2003H</td>
<td>Capstone Course: Integrating Issues in Public Policy (Prerequisite: successful completion of at least 5.5 FCEs in MPP courses)</td>
</tr>
</tbody>
</table>

Choose one of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG2011H</td>
<td>Ethics and the Public Interest (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)</td>
</tr>
<tr>
<td>PPG2022H</td>
<td>Moral Foundations of Public Policy (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)</td>
</tr>
</tbody>
</table>

**Elective Courses**

Offered by the Munk School of Global Affairs and Public Policy:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG2001H</td>
<td>Legal Analysis of Public Policy</td>
</tr>
<tr>
<td>PPG2008H</td>
<td>Comparative Public Policy and Transnational Forces</td>
</tr>
<tr>
<td>PPG2010H</td>
<td>Panel Data Methods for Public Policy Analysis</td>
</tr>
<tr>
<td>PPG2012H</td>
<td>Topics in Public Policy</td>
</tr>
<tr>
<td>PPG2013H</td>
<td>Topics in Public Policy I</td>
</tr>
<tr>
<td>PPG2014H</td>
<td>Topics in Public Policy II</td>
</tr>
<tr>
<td>PPG2015H</td>
<td>Topics in Public Policy III</td>
</tr>
<tr>
<td>PPG2017H</td>
<td>Topics in Public Policy: Urban Policy</td>
</tr>
<tr>
<td>PPG2018H</td>
<td>The Role of Government</td>
</tr>
<tr>
<td>PPG2021H</td>
<td>Priority Topics in Public Administration</td>
</tr>
</tbody>
</table>

Cross-Listed with the Faculty of Law:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW7030H</td>
<td>Issues in Aboriginal Law and Policy</td>
</tr>
</tbody>
</table>

**Internship**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG2006Y</td>
<td>MPP Internship (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)</td>
</tr>
</tbody>
</table>
Health Policy, Management and Evaluation

HPME: Introduction

Faculty Affiliation

Public Health

Degree Programs

Health Policy, Management and Evaluation

MSc

• Concentrations:
  o Clinical Epidemiology and Health Care Research;
  o Health Services Research
    ▪ Emphases:
      ▫ Health Economics;
      ▫ Health Informatics Research;
      ▫ Health Policy;
      ▫ Health Services Organization and Management Studies
      ▫ Health Services Outcomes and Evaluation;
      ▫ Health Systems Artificial Intelligence;
      ▫ Health Technology Assessment;
  o Quality Improvement and Patient Safety;
  o System Leadership and Innovation

PhD

• Concentrations:
  o Clinical Epidemiology and Health Care Research;
  o Health Professions Education Research;
  o Health Services Research

Health Administration

MHSc

Health Informatics

MHI

Combined Degree Programs

• STG, Health Administration, MHSc / MSW (admissions have closed)

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Aging, Palliative and Supportive Care Across the Life Course
  o Health Administration, MHSc
  o Health Policy, Management and Evaluation, MSc, PhD

• Bioethics
  o Health Administration, MHSc
  o Health Policy, Management and Evaluation, MSc, PhD

• Global Health (U of T Global Scholar)
  o Health Policy, Management and Evaluation, MSc (thesis only), PhD

• Health Services and Policy Research
  o Health Policy, Management and Evaluation, MSc, PhD

• Public Health Policy
  o Health Administration, MHSc
  o Health Policy, Management and Evaluation, MSc, PhD

• Resuscitation Sciences (admissions have been administratively suspended)
  o Health Policy, Management and Evaluation, MSc, PhD

• Women and Gender Studies
  o Health Administration, MHSc
  o Health Policy, Management and Evaluation, MSc, PhD

• Women's Health
  o Health Policy, Management and Evaluation, MSc, PhD

Overview

The Institute of Health Policy, Management and Evaluation (IHPME) brings together researchers from a wide range of disciplinary backgrounds. Broad research themes include Clinical Epidemiology and Health Care Research; Health Services Research including Health Informatics Research, Health Economics, Health Policy, Health Services Organization and Management Studies, Health Services Outcomes and Evaluation, Health Technology Assessment, and Knowledge Translation; Health Administration; System Leadership and Innovation; and Quality Improvement and Patient Safety.

More than 200 faculty members from a variety of disciplines are represented in IHPME. At least 130 senior health care executives serve as adjunct faculty.

Please note the application deadlines.

November 15

• MSc in Health Policy, Management and Evaluation concentrations: Clinical Epidemiology and Health Care Research; Health Services Research; Quality Improvement and Patient Safety
• PhD in Health Policy, Management and Evaluation concentrations: Clinical Epidemiology and Health Care Research; Health Professions Education Research; Health Services Research
January 15

- MSc in Health Policy, Management and Evaluation concentration: System Leadership and Innovation (Undergraduate Medical Education applicants)

February 1

- Master of Health Informatics
- MHSc in Health Administration
- MHSc in Health Administration / MSW combined degree program
- MHSc in Health Administration / MN combined degree program

March 1

- Master of Health Informatics (executive option)

March 15

- MSc in Health Policy, Management and Evaluation concentration: System Leadership and Innovation (Postgraduate Medical Education applicants)

Contact and Address

Web: ihpme.utoronto.ca/community/connect
Email: ihpme@utoronto.ca
Telephone: (416) 978-4326
Fax: (416) 978-7350

Institute of Health Policy, Management and Evaluation
University of Toronto
4th Floor, 155 College Street
Toronto, Ontario M5T 3M6
Canada

Health Policy, Management and Evaluation:
Graduate Faculty

Full Members

Alibhai, Shabbir - MD
Alter, David - MD
Anderson, Geoff - MD
Andiappan, Meena - PhD
Austin, Peter - PhD
Austin, Zubin - BA, BScPhm, MBA, M Ist, MEd, PhD
Baker, G. Ross - AB, MA, PhD
Barwick, Melanie - BA, MA, PhD
Bayoumi, Ahmed - MD
Bell, Chaim - MD
Berta, Whitney - BS, MBA, PhD
Bhattacharyya, Onil - BSc, MD
Bombard, Yvonne - PhD
Bombardier, Claire - MA, MD
Brown, Adalsteinn - AB, PhD (Dean)
Brydges, Ryan - BSc, MSc, PhD
Cafazzo, Joseph - DPhil
Carroll, June - MD
Chan, Kelvin - MSc, MD
Cheung, Angela - BA, MD, PhD
Coburn, Natalie Suzanne - BSc, MSc, DrMed
Cockerill, Rhonda W - BA, MA, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Côté, Pierre - MSc, PhD
Coyte, Peter C - BA, MA, PhD
Cuthbertson, Brian - MBChB, PhD
Dainty, Katie - BA, MSc, PhD
Davis, David - BA, MD
Deber, Raisa - BS, MS, PhD
Detsky, Allan - BS, MD, PhD
Donnelly, Peter - MBA, MPH, MBChB, MD
Etchells, Edward - MSc, MD
Fan, Eddy - BSc, MD, PhD
Feldman, Brian - MD
Ferguson, Niall - MSc, MD
Forrest, Christopher Robert - BSc, MSc, MD
Gagliardi, Anna - BSc, BE, MSc, MLS, PhD
Gershon, Andrea - MSc, MD
Ginsburg, Shiphra - MEd, MD
Glazier, Richard - MPH, MD
Goel, Vivek - BSc, MSc, SM, MD
Gomes, Tara - BSc, MHSc
Griffiths, Anne - MD
Gupta, Sumit - MD
Guttman, Astrid - BA, AB, MSc, MSc, MDCM
Hansen, Bettina Elisabeth - MSc, PhD
Hoch, Jeffrey - BA, MA, PhD
Howell, Doris - BNSc, MSN, PhD
Isaranuwatchai, Wanrudee - BSc, PhD
Ivers, Noah - MD
Jaglal, Susan - BSc, MSc, PhD
Jefferies, Lianne - MSN, PhD
Juni, Peter - DrMed
Juurlink, David - BSc, MD, PhD
Kapral, Moira - MD
Karkouti, Keyvan - MD
Krahn, Murray - BA, MSc, MD
Klings, Timo - MSc, MD, PhD
Kulkarni, Girish - MD
Kuluski, Kerry - DPhil
Kurdyak, Paul - BSc, MSc, MD
Laporte, Audrey - BA, MA, PhD (Director)
Law, Calvin - MD, MPH, CPSO, LMCC
Lin, Elizabeth - PhD
Logan, Alexander - MD
Mamdani, Muhammad - DP
Marchildon, Gregory - PhD
Martimianakis, Tina - MA, MEd, PhD
McLeod, Robin - BSc, MD, LMCC
Miller, Fiona - BIS, MA, DPhil
Morrison, Laurie - BSc
Mylopoulos, Maria - BS, MA, PhD
Naglie, Gary - BSc, MDCM
Naimark, David - MD
Naylor, C. David - MD, PhD
O'Sullivan, Julia - BA, MA, PhD
Offringa, Martin - PhD
Parshuram, Christopher - MBChB
Pechlivanoglou, Petros - PhD
Pullenayegum, Eleanor - BM, PhD
Ray, Joel - MSc, MD
Redelmeier, Donald - MS, MD
Rehm, Jurgen - PhD
Rochon, Paula - MD
Rodin, Gary M. - BSc, MD
Rubenfeld, Gordon - MSc, MD
Rush, Brian - BA, MA, PhD
Seto, Emily - PhD
Shachak, Aviv - PhD (Graduate Coordinator)
Sinha, Samir Kumar - BSc, MSc, MD, BScMed, PhD
Stable, Mark - BA, MA, PhD, PhD
Stukel, Therese - BS, PhD
Sung, Lillian - MD
Sutradhar, Rinku - BSc, MMath, PhD
Tinmouth, Jill - MD, PhD
To, Teresa - BSc, MSc, PhD
Trbovich, Patricia L. - BA, MA, PhD, PhD
Tu, Karen - BSc, MD
Ungar, Wendy - BA, MSc, PhD
Urbach, David - MSc, MD
Verderber, Stephen - BSc, AA, MArch, PhD
Vigod, Simone - MD
Walmsley, Sharon - BSc, MSc, MD
Webster, Fiona - BA, MA, PhD
Wiljer, David - PhD
Wodchis, Walter - MA, PhD
Wong, Agnes - DOMS, MD, PhD
Woods, Nicole - BA, PhD
Wright, James - BA, MPH, MD, LMCC

Members Emeriti

Barnsley, Jan - BSc, MSc, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Lemieux-Charles, Louise - PhD
Williams, Paul - PhD

Associate Members

Abbasi, Nimrah - MSc, MD
Abrahamyan, Lusine - MPH, MD, PhD
Adhikari, Neill - MDCM
Alam, Nadia - MD
Alba, Ana Carolina - DrMed, PhD
Albert, Mathieu - PhD
Allin, Sara - BA, MSc, PhD, PhD
Amaral, Andre - MD
Amin, Reshma - MD
Amir, Eitan - MBChB
Ammendolia, Carlo - MedScD
Anderson, James - BA, MA, MHSA, PhD
Anderson, Kelly - PhD
Andrade, Ada - MN
Angle, Pamela - MD
Ardal, Sten - BA, MA
Ashbury, Fredrick D - BA, MA, PhD
Avila, Maria Laura - MD, PhD
Baigrie, Brian - BA, MA, PhD
Barnett Tapia, Carolina - DrMed
Basu, Sanjay - MD
Baumann, Andrea - BN, MN, PhD
Benchimol, Eric - MD
Berger, Ken - MD, JD
Bethell, Jennifer Margaret - PhD
Beyene, Joseph - BSc, MSc, PhD
Birken, Catherine - MSc, MD
Born, Karen - BA, MSc, PhD
Brandao, Leonardo - MD
Brar, Mantaj - BS, MS, MD
Brezden-Masley, Christine - MD, PhD
Brown, Hilary Kathryn - BA, MSc, PhD
Campbell, Wenonah - PhD
Chahal, Jaskarn - BSc, MSc, MD
Chan, Brian Chun-Fai - BScPhm, MSc, PhD
Chan, Vincy - DPhil
Charach, Alice - MD
Chiu, Maria - BE, BA, MSc, PhD
Church, Peter - MD
Clarke, Hance - MSc, MD
Cram, Peter - BA, MBA, MD
Dale, Ann - PhD
Daneman, Nick - BA, MD
Darling, Liz - PhD
de Almeida, John - MD
Desveaux, Laura - PhD
Dhuey, Elizabeth Ann - BA, MEd, PhD
Di Ruggiero, Enrica Maria Christine - BSc, MHSc, PhD
Dolatabadi, Elham - BScEE, MEng, PhD
Esensoy, Ali - PhD
Essue, Beverley - PhD
Evans, Gerald - MD
Evans, Jenna - PhD
Fam, Mark - MHSAn
Fehlings, Darcy - MD
Feig, Denice - MD
Follett-Rowe, Margot - MS
Forman, Lisa - SJD
Furlan, Julio - MSc, DrMed, PhD
Furness, Colin - BSc, PhD
Gaines, Tommi - PhD
Gall, Carie - BA, BSc(OT)
Gaudette, Etienne - PhD
Gien, Lilian - BSc, MHPE, MD
Ginzburg, Amir - BSc, MD
Gob, Alan - MD
Goldman, Russell - MPH, MD
Gozdyra, Piotr - BA, MA
Greiver, Michelle - MD
Gruzd, Anatoliy - PhD
Guerguerian, Anne Marie - MD
Guerriere, Denise - PhD
Gupta, Vikas - MBBS
Haas, Barbara - BS, MD, PhD
Hayeems, Robin - DPH
Hoang-Kim, Amy - PhD
Holloway, Kelly J. - PhD
Howard, Andrew William - BA, MSc, MD, CPSO, LMCC
Jaakkimainen, Liisa - BSc, MSc, MD
Jacobson, Jenna - PhD
Jassal, Vanita - MD
Jerath, Angela - BSc, MBBS
Johnson, Sindhu - BMedSc, MD, PhD
Kantararvic, Jasmin - PhD
Karanicolos, Paul - BSc, DrMed, PhD
Kassardjian, Charles - DrMed
Kastner, Monika - BSc, MSc, PhD
Kiran, Tara - BSc, MPH, MD
Klein, David - MD
Ko, Dennis - MD
Koyle, Martin - DrMed
Kusurkar, Rashmi - PhD
Ladha, Karim - AB, MSc, MD
Lalloo, Chitra - PhD
Lapointe-Shaw, Lauren - MD, PhD
Lavergne, M. Ruth - PhD
Law, Susan - BSc, MHSc, PhD
Lebovic, Gerald - PhD
Leighl, Natasha - MD
HPME: Health Policy, Management and Evaluation MSc

Master of Science

Program Description

The HPME graduate program offers the following concentrations leading to the MSc degree:

- Clinical Epidemiology and Health Care Research;
- Health Services Research;
- Quality Improvement and Patient Safety; and
- System Leadership and Innovation.

The MSc program can be taken on a full-time or part-time basis.
Concentration: Clinical Epidemiology and Health Care Research

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME’s additional admission requirements stated below.
- Applicants require an overall B+ average or higher in the last two years of an appropriate bachelor’s degree from a recognized university. For applicants to this concentration, a degree in a health profession (e.g., MD, BScN, BScOT, BScPT, DDM, MScN) from a recognized university with a B+ average in the final two years is required.

Program Requirements

Two options are available:

- Thesis option comprising 3.0 full-course equivalents (FCEs) and a thesis.
- Coursework-only option comprising 5.0 FCEs, including completion of at least one research practicum.

Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Thesis MSc

- Completion of 3.0 FCEs as follows:
  - 1.5 FCEs required: HAD5301H, HAD5307H, and one of HAD5303H, HAD5304H, HAD5306H, or HAD5309H
  - 1.5 FCEs in electives.
- A thesis written under the supervision of a thesis committee (supervisor and at least one, and preferably two, additional graduate faculty members) and its defence before an examination committee.

Coursework-Only MSc

- Completion of 5.0 FCEs as follows:
  - 2.0 FCEs required: HAD5301H, HAD5307H, HAD6360H, and one of HAD5303H, HAD5304H, or HAD5309H
  - 3.0 FCEs in electives.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Concentration: Health Services Research

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME’s additional admission requirements stated below.
- Applicants require an overall B+ average or higher in the last two years of an appropriate bachelor’s degree from a recognized university. For applicants to Clinical Epidemiology and Health Care Research, a degree in a health profession (e.g., MD, BScN, BScOT, BScPT, DDM, MScN) from a recognized university with a B+ average in the final two years is required.

Program Requirements

Two options are available:

- Thesis option comprising 3.0 full-course equivalents (FCEs) and a thesis.
- Coursework-only option comprising 5.0 FCEs.

Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Thesis MSc

- Completion of 3.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE in research methodology courses
  - 1.0 FCE in health services research courses:
    - HAD5011H Canada's Health Care System and Health Policy
    - 0.5 FCE from other health services research courses
  - 1.0 FCE in electives.
- A thesis written under the supervision of a thesis committee and its defence before an examination committee.

Coursework-Only MSc

- Completion of 5.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE in health services research courses, normally HAD5011H, HAD5022H, HAD5727H, HAD5756H, and HAD5773H
  - 1.0 FCE in research methodology courses, normally HSR1001H, HAD5765H, HAD5772H, HAD5740H, HAD5742H, HAD5744H, HAD5746H, HAD5779H, and HAD5781H

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time
Time Limit

3 years full-time; 6 years part-time

Students in the thesis option of the Health Services Research concentration have the option to complete an emphasis by completing 2.0 full-course equivalents (FCEs) in a given area. The emphasis requirements will also count toward their 3.0 FCE concentration requirements.

Students in the Vector pathway within the Health Services Research concentration must complete the emphasis in Health Systems Artificial Intelligence and complete their remaining 1.0 FCE concentration requirements by taking HAD5011H and HAD5772H.

Emphasis: Health Economics

Students must complete 2.0 FCEs as follows:

- HAD5730H Economic Evaluation Methods for Health Service Research.
- HAD5744H Applied Health Econometrics I.
- HAD5746H Applied Health Econometrics II.

Emphasis: Health Informatics Research

Students must complete 2.0 FCEs as follows:

- HAD5726H Evaluation and Research Design in Health Informatics.
- Three courses (1.5 FCEs) from the course listing for the Health Services Research concentration, Master of Health Informatics program, or other relevant graduate courses as approved by the Graduate Coordinator.

Emphasis: Health Policy

Students must complete 2.0 FCEs as follows:

- CHL5300H Public Health Policy.
- HAD5778H Comparative Health Systems and Policy.
- 1.0 FCE from the following list:
  - CHL5308H Tools and Approaches for Public Health Policy Analysis and Evaluation
  - HAD5022H Politics, Policy, Public Health, and Health Technology
  - HAD5765H Case Studies in Health Policy
  - Other health policy research course as appropriate, for example:
    - CHL5523H Indigenous Health and Social Policy
    - CHL5702H History of International Health or

Emphasis: Health Services Organization and Management Studies

Students must complete 2.0 FCEs as follows:

- HAD5773H Introduction to Theories of Organizational Behaviour and Applications to the Health Care Sector.
- 1.5 FCEs from the following list:
  - HAD5727H Knowledge Transfer and Exchange
  - HAD5737H Tools for Implementation of Best Evidence
  - HAD5740H Intermediate Level Qualitative Research for Health Services and Policy Research
  - HAD5742H Mixed Methods for Health Services Research
  - HAD5744H Applied Health Econometrics I
  - HSR1001H Introduction to Qualitative Methods for Health Services and Policy Research.

Emphasis: Health Services Outcomes and Evaluation

Students must complete 2.0 FCEs as follows:

- HAD5720H Evaluation I
- 0.5 FCE from the following list:
  - HAD5743H Evaluation II
  - HAD5763H Advanced Methods in Health Services Research
- 0.5 FCE from the following list:
  - CHL5202H Biostatistics II
  - HAD5316H Biostatistics II: Advanced Techniques in Applied Regression Methods
  - HAD5772H Intermediate Statistics for Health Services Researchers
- 0.5 elective FCE from the course listing for the Health Services Research concentration.

Emphasis: Health Systems Artificial Intelligence

Students must complete 2.0 FCEs as follows:

- CHL3020H Ethics and AI in Health
- CHL5230H Applied Machine Learning for Health Data (research methods course)
- MHI2002H Emergent Topics in Health Informatics
- 0.5 FCE from the course listing for the Health Services Research concentration or the Master of Health Informatics program. Recommended: HAD5726H Evaluation and Research Design in Health Informatics.

Emphasis: Health Technology Assessment

Students must complete 2.0 FCEs as follows:

- HAD5301H Introduction to Clinical Epidemiology and Health Care Research.
- HAD5307H Introduction to Applied Biostatistics.
- 0.5 FCE from the course listing for the Health Services Research concentration.
- 0.5 FCE from the following list:
  - HAD5730H Economic Evaluation Methods for Health Service Research
  - HAD5771H Resource Allocation Ethics
Concentration: Quality Improvement and Patient Safety

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME's additional admission requirements stated below.
- Applicants require an overall B+ average or higher in the last two years of an appropriate bachelor's degree from a recognized university.

Program Requirements

Two options are available:

1. Thesis option comprising 3.0 full-course equivalents (FCEs) and a thesis.
2. Coursework-only option comprising 5.0 FCEs, including completion of at least one research practicum.

Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Thesis MSc

- Completion of **3.0 FCEs** as follows:
  o 2.5 FCEs required: HAD3010H, HAD3020H, HAD3041Y0, HAD3050H
  o 0.5 FCE in electives.
- **A thesis** written under the supervision of a thesis committee (comprising the supervisor and at least one additional graduate faculty member, preferably two) and its defence before an examination committee.

Coursework-Only MSc

- Completion of **5.0 FCEs** as follows:
  o 3.0 required FCEs (HAD3010H, HAD3020H, HAD3030H, HAD3050H, HAD3060H, HAD3070H)
  o 1.0 required FCE in a research project practicum (HAD3040Y)
  o 1.0 FCE in electives.

Program Length

- 3 sessions full-time (typical registration sequence: S/F/W);
- 6 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time

Concentration: System Leadership and Innovation

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME's additional admission requirements stated below.
- Applicants require an overall B+ average or higher in the last two years of an appropriate bachelor's degree from a recognized university.
- Applicants must have health-care experience and demonstrate aptitude for innovation and health systems.
- Preference will be given to medical trainees in a Canadian Faculty of Medicine or to early-career physicians.
  Undergraduate medical trainees who are accepted must register part-time; post-graduate medical education trainees who are accepted may register full-time or part-time.

Program Requirements

The concentration in System Leadership and Innovation consists of coursework only. Students begin this concentration in the Summer session.

- Completion of **5.0 full-course equivalents (FCEs)** as follows:
  o 2.0 required FCEs (HAD2001H; HAD2002H or HAD2012H; HAD2003H or HAD2013H; HAD2004H or HAD2007H)
  o 1.0 required practicum FCE (HAD2010H and HAD2020H or HAD2040Y)
  o 2.0 elective FCEs, of which a maximum 1.0 FCE can be a practicum; please consult with the department about electives
  o Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses.

Program Length

- 3 sessions full-time (typical registration sequence: S/F/W);
- 7 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time
HPME: Health Policy, Management and Evaluation PhD

Doctor of Philosophy

Program Description

The HPME graduate program offers three concentrations leading to the PhD degree: 1) Clinical Epidemiology and Health Care Research; 2) Health Professions Education Research; and 3) Health Services Research.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MA or MSc degree; 2) transfer from the University of Toronto MSc/PhD transfer program; 3) direct entry following completion of a health professional (MD) degree.

The PhD program can be taken on a full-time or flexible-time basis. Some applicants may be admitted to a flexible-time PhD option with the approval of the Graduate Chair. The flexible-time PhD option benefits mature students with career and/or familial obligations.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the IHPME's additional admission requirements stated below.
- A master's degree (MA or MSc) requiring a thesis with a B+ average or higher.
- Applicants to the Clinical Epidemiology and Health Care Research concentration must have a degree in a health profession (e.g., MD, BScN, BScOT, BScPT, DDM, MScN, or equivalent).
- Satisfactory references pertaining to the applicant's academic and research abilities.
- Outstanding students with a non-thesis master's degree may be admitted to the PhD upon the recommendation of the appropriate IHPME committee, if the applicant has the appropriate background preparation and research experience or publications which can be considered equivalent to a master's thesis. Students with a non-thesis master's degree and little or no research experience may be admitted to the MSc program and may petition to transfer into the PhD program within 24 months of first registration. Transfer is contingent upon successful completion of master's coursework and preparation and defence of a PhD thesis proposal.
- Some applicants may be admitted to a flexible-time PhD option with the approval of the Graduate Chair. The flexible-time PhD option benefits mature students with career and/or familial obligations.

Program Requirements

- Completion of a comprehensive course.
- Completion of 5.0 full-course equivalents (FCEs) from the PhD courses listed below.
- Students enrolled in the Clinical Epidemiology and Health Care Research concentration must select 2.0 FCEs compulsory courses and 2.0 recommended FCEs from the Clinical Epidemiology and Health Care Research courses listed below.
- Students enrolled in the Health Professions Education Research concentration must select 2.5 FCEs compulsory courses from the Health Professions Research courses listed below.
- Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- Writing of a PhD thesis under the supervision of an approved thesis committee (supervisor plus at least two additional graduate faculty members).
- Oral defence of the thesis before an examination committee.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Concentration: Health Services Research

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the IHPME's additional admission requirements stated below.
- A master's degree (MA or MSc) requiring a thesis with a B+ average or higher.
- Satisfactory references pertaining to the applicant's academic and research abilities.
- Outstanding students with a non-thesis master's degree may be admitted to the PhD upon the recommendation of the appropriate IHPME committee, if the applicant has the appropriate background preparation and research experience or publications which can be considered equivalent to a master's thesis. Students with a non-thesis master's degree and little or no research experience may be admitted to the MSc program and may petition to transfer into the PhD program within 24 months of first registration. Transfer is contingent upon successful completion of master's coursework and preparation and defence of a PhD thesis proposal.
Some applicants may be admitted to a flexible-time PhD option with the approval of the Graduate Chair. This option benefits mature students with career and/or familial obligations.

Program Requirements

- Students must select one of six emphases, and complete the required emphasis courses listed below.
- Completion of **5.0 full-course equivalents (FCEs)** including:
  - A comprehensive course (0.5 FCE) specified as part of the requirements for each emphasis below.
  - 2.0 FCEs as follows: HAD5011H, HAD5772H (or equivalent if specified in the selected emphasis), HAD6760H, and HAD6770H.
- Writing of a PhD thesis under the supervision of an approved thesis committee (supervisor plus at least two additional graduate faculty members).
- Final Oral Examination of the thesis before an examination committee.

Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

Students enrolled in the Health Services Research Concentration of the PhD Program must pursue **one of six emphases**, described below, and complete six courses (3.0 full-course equivalents [FCEs]) related to their declared emphasis.

**Emphasis: Health Economics**

Students must complete 3.0 FCEs as follows:

- HAD5730H Economic Evaluation Methods for Health Service Research.
- HAD5744H Applied Health Econometrics I.
- HAD5746H Applied Health Econometrics II.
- HAD6750H Advanced Health Economics and Policy Analysis II.
- 0.5 FCE from the course listing for the Health Services Research concentration.

**Emphasis: Health Informatics Research**

Students must complete 3.0 FCEs as follows:

- HAD5726H Evaluation and Research Design in Health Informatics.

- HAD5747H Cognitive, Social, and Information Science Theory in Health Informatics Research.
- HAD6764H Health Informatics Research Comprehensive Course.
- Three courses (1.5 FCEs) from the course listing for the Health Services Research concentration, Master of Health Informatics program, or other relevant graduate courses as approved by the Graduate Coordinator.

**Emphasis: Health Policy**

Students must complete 3.0 FCEs as follows:

- CHL5300H Public Health Policy (students may elect to take this course on a Credit/No Credit basis).
- HAD5778H Comparative Health Systems and Policy.
- HAD6763H Health Policy Comprehensive Course.

- 0.5 FCE from the following list:
  - CHL5523H Indigenous Health and Social Policy.
  - CHL5702H History of International Health.

- 0.5 FCE from the following list:
  - HAD5742H Mixed Methods for Health Services Research.
  - HAD5781H Case Study Research for Health Services, Systems, and Policy.
  - HSR1001H Introduction to Qualitative Methods for Health Services and Policy Research.

- Other courses from the course listing for the Health Services Research concentration in the area of policy-relevant methods.

- 0.5 FCE from the course listing for the Health Services Research concentration, or other HPME concentrations as approved by the HPME graduate coordinator.

**Emphasis: Health Services Organization and Management Studies**

Students must complete 3.0 FCEs as follows:

- HAD5742H Mixed Methods for Health Services Research.
- HAD5750H Seminar in Organizational Behaviour.
- HAD5773H Introduction to Theories of Organizational Behaviour and Applications to the Health Care Sector.
- HAD6762H Health Services Organization and Management Comprehensive Course.
- HSR1001H Introduction to Qualitative Methods for Health Services and Policy Research.

- One course (0.5 FCE) from the course listing for the Health Services Research concentration.

**Emphasis: Health Services Outcomes and Evaluation**

Students must complete 3.0 FCEs as follows:
• HAD5743H Evaluation II.
• HAD6761H Health Services Outcomes and Evaluation Comprehensive Course.
• HSR1001H Introduction to Qualitative Methods for Health Services and Policy Research.
• Two courses (1.0 FCE) from the following list:
  o HAD5720H Evaluation I.
  o HAD5728H Performance Measurement in Health Care: Theory and Application.
  o HAD5730H Economic Evaluation Methods for Health Service Research.
  o HAD5740H Intermediate Level Qualitative Methods for Health Services and Policy Research.
  o HAD5742H Mixed Methods for Health Services Research.
  o HAD5763H Advanced Methods in Health Services Research.
  o HAD5781H Case Study Research for Health Services, Systems and Policy.
• One course (0.5 FCE), generally an advanced methods course, from the course listing for the Health Services Research concentration.

PhD students in the Health Services Research concentration who are pursuing the emphasis in Health Services Outcomes and Evaluation may fulfill the concentration requirements by replacing HAD5772H Intermediate Statistics for Health Services Researchers with CHL5202H Biostatistics II or HAD5316H Biostatistics II: Advanced Techniques in Applied Regression Methods.

**Emphasis: Health Technology Assessment**

Students must complete 3.0 FCEs as follows:

- HAD5301H Introduction to Clinical Epidemiology and Health Care Research.
- HAD6765H Health Technology Assessment Comprehensive Course (Credit/No Credit).
- Three courses (1.5 FCEs) from the course listing for the Health Services Research concentration.
- One course (0.5 FCE) from the following list:
  o HAD5730H Economic Evaluation Methods for Health Service Research
  o HAD5771H Resource Allocation Ethics
  o HAD5779H Evidence Synthesis for Health Services, Systems and Policy Research.

**PhD Program (Flexible-Time)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the IHPME's additional admission requirements stated below.
- A master's degree (MA or MSc) requiring a thesis with a B+ average or higher.
- Applicants to the Clinical Epidemiology and Health Care Research concentration must have a degree in a health profession (e.g., MD, BScN, BScOT, BScPT, DDM, MScN, or equivalent).
- Satisfactory references pertaining to the applicant's academic and research abilities.
- Outstanding students with a non-thesis master's degree may be admitted to the PhD upon the recommendation of the appropriate IHPME committee, if the applicant has the appropriate background preparation and research experience or publications which can be considered equivalent to a master's thesis. Students with a non-thesis master's degree and little or no research experience may be admitted to the MSc program and may petition to transfer into the PhD program within 24 months of first registration. Transfer is contingent upon successful completion of master's coursework and preparation and defence of a PhD thesis proposal.

**Program Requirements**

- With the approval of the Graduate Chair, some applicants may be admitted to a flexible-time PhD program. This program will benefit students with career obligations. The degree requirements for the flexible-time PhD program are identical to those listed above for the full-time PhD program.
- Students must register full-time for the first four years of their program (Fall, Spring, Summer sessions); thereafter, they may register part-time.
- Completion of a comprehensive course.
- Completion of 5.0 full-course equivalents (FCEs) from the PhD courses listed below.
- Students enrolled in the Clinical Epidemiology and Health Care Research concentration must select 2.0 FCEs compulsory courses and 2.0 recommended FCEs from the Clinical Epidemiology and Health Care Research courses listed below.
- Students enrolled in the Health Professions Education Research concentration must select 2.5 FCEs compulsory courses from the Health Professions Research Research courses listed below.
- Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- Writing of a PhD thesis under the supervision of an approved thesis committee (supervisor plus at least two additional graduate faculty members).
- Oral defence of the thesis before an examination committee.

**Program Length**

6 years

**Time Limit**

8 years
HPME: Health Policy, Management and Evaluation MSc, PhD Courses

Students in the Master of Science and Doctor of Philosophy programs may elect to be assessed on a Credit/No Credit basis in courses marked by the symbol ⌘ up to a total of 0.5 FCE.

Concentration: Clinical Epidemiology and Health Care Research

**Compulsory Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5301Hã</td>
<td>Introduction to Clinical Epidemiology and Health Care Research</td>
</tr>
<tr>
<td>HAD5307Hã</td>
<td>Introduction to Applied Biostatistics</td>
</tr>
<tr>
<td>HAD5311H0</td>
<td>Comprehensive/Synthesis (one year)</td>
</tr>
<tr>
<td>HAD5316Hã</td>
<td>Biostatistics II: Advanced Techniques in Applied Regression Methods</td>
</tr>
</tbody>
</table>

*Course that may continue over a program. The course is graded when completed.*

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5302Hã</td>
<td>Measurement in Clinical Research</td>
</tr>
<tr>
<td>HAD5303Hã</td>
<td>Controlled Clinical Trials</td>
</tr>
<tr>
<td>HAD5304Hã</td>
<td>Clinical Decision Making and Cost Effectiveness</td>
</tr>
<tr>
<td>HAD5305Hã</td>
<td>Evidence-Based Guidelines</td>
</tr>
<tr>
<td>HAD5306Hã</td>
<td>Introduction to Health Services Research and the Use of Health Administrative Data</td>
</tr>
<tr>
<td>HAD5308Hã</td>
<td>Evidence Synthesis: Systematic Reviews and Meta-Analysis</td>
</tr>
<tr>
<td>HAD5309Hã</td>
<td>Observational Studies: Theory, Design, and Methods</td>
</tr>
<tr>
<td>HAD5310Hã</td>
<td>Pragmatic Issues in Conduct of Controlled Trials</td>
</tr>
<tr>
<td>HAD5730Hã</td>
<td>Economic Evaluation Methods for Health Service Research</td>
</tr>
<tr>
<td>HAD5760Hã</td>
<td>Advanced Health Economics and Policy Analysis</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5312Hã</td>
<td>Decision Modelling for Clinical Policy and Economic Evaluation</td>
</tr>
<tr>
<td>HAD5313H</td>
<td>Advanced Design and Analysis Issues in Clinical Trials</td>
</tr>
</tbody>
</table>

Other IHPME courses or extra-departmental courses may be considered as elective courses and are subject to approval of the Institute of Health Policy, Management and Evaluation.

**Concentration: Health Professions Education Research (HPER)**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5011Hã</td>
<td>Canada’s Health Care System and Health Policy (Doctoral Stream)</td>
</tr>
<tr>
<td>HAD6500Hã</td>
<td>Essential Skills in HPER</td>
</tr>
<tr>
<td>HAD6501Hã</td>
<td>Introduction to Methods/Methodologies for HPER</td>
</tr>
<tr>
<td>HAD6502Hã or HAD6503Hã</td>
<td>Survey of Critical and Interpretive Social Science Theory for HPER or Survey of Cognitive, Behavioural, and Epidemiological Sciences Theory</td>
</tr>
<tr>
<td>HAD6504Hã or HAD6505Hã</td>
<td>Intermediate Critical and Interpretive Social Science Methods or Intermediate Cognitive, Behavioural, and Epidemiological Sciences Methods</td>
</tr>
<tr>
<td>HAD6560H</td>
<td>Health Professions Education Research (HPER) Comprehensive Exam</td>
</tr>
</tbody>
</table>

**Elective Courses**

All Health Services Research courses and Clinical Epidemiology and Health Care Research courses or extradepartmental courses may be considered as elective courses and are subject to approval of the Institute of Health Policy, Management and Evaluation.

**Concentration: Health Services Research**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5011Hã</td>
<td>Canada’s Health Care System and Health Policy (Doctoral Stream)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
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</tr>
<tr>
<td>HAD5012H</td>
<td>Patient and Caregiver Engagement in Research</td>
</tr>
<tr>
<td>HAD5022H</td>
<td>Politics, Policy, Public Health, and Health Technology</td>
</tr>
<tr>
<td>HAD5726H</td>
<td>Evaluation and Research Design in Health Informatics</td>
</tr>
<tr>
<td>HAD5727H</td>
<td>Knowledge Transfer and Exchange</td>
</tr>
<tr>
<td>HAD5728H</td>
<td>Performance Measurement in Health Care: Theory and Application</td>
</tr>
<tr>
<td>HAD5730H</td>
<td>Economic Evaluation Methods for Health Service Research</td>
</tr>
<tr>
<td>HAD5737H</td>
<td>Tools for Implementation of Best Evidence</td>
</tr>
<tr>
<td>HAD5738H</td>
<td>Advanced Methods in Economic Evaluation</td>
</tr>
<tr>
<td>HAD5740H</td>
<td>Intermediate-Level Qualitative Research for Health Services and Policy Research</td>
</tr>
<tr>
<td>HAD5742H</td>
<td>Mixed Methods for Health Services Research</td>
</tr>
<tr>
<td>HAD5743H</td>
<td>Evaluation II</td>
</tr>
<tr>
<td>HAD5744H</td>
<td>Applied Health Econometrics I</td>
</tr>
<tr>
<td>HAD5745H</td>
<td>Where Health Economics Hits the Road: Practical Applications of Economics to Real Health Care Problems</td>
</tr>
<tr>
<td>HAD5746H</td>
<td>Applied Health Econometrics II</td>
</tr>
<tr>
<td>HAD5747H</td>
<td>Cognitive, Social, and Information Science Theory in Health Informatics Research</td>
</tr>
<tr>
<td>HAD5748H</td>
<td>Introduction to Survey Design and Psychometrics (prerequisite: HAD5772H or equivalent)</td>
</tr>
<tr>
<td>HAD5749H</td>
<td>Knowledge to Action: Disseminating and Implementing Evidence into Practice</td>
</tr>
<tr>
<td>HAD5750H</td>
<td>Seminar in Organizational Behaviour</td>
</tr>
<tr>
<td>HAD5755Y</td>
<td>Health Economics Graduate Seminar Series (Credit/No Credit)</td>
</tr>
<tr>
<td>HAD5760H</td>
<td>Advanced Health Economics and Policy Analysis</td>
</tr>
<tr>
<td>HAD5763H</td>
<td>Advanced Methods in Health Services Research</td>
</tr>
<tr>
<td>HAD5771H</td>
<td>Resource Allocation Ethics</td>
</tr>
<tr>
<td>HAD5772H</td>
<td>Intermediate Statistics for Health Services Researchers</td>
</tr>
<tr>
<td>HAD5773H</td>
<td>Introduction to Theories of Organizational Behaviour and Applications to the Health Care Sector</td>
</tr>
<tr>
<td>HAD5774H</td>
<td>Comparative Health Care Systems</td>
</tr>
<tr>
<td>HAD5777H</td>
<td>Leading and Managing Change: Building Adaptive Capacity</td>
</tr>
<tr>
<td>HAD5778H</td>
<td>Comparative Health Systems and Policy</td>
</tr>
<tr>
<td>HAD5779H</td>
<td>Evidence Synthesis for Health Services, Systems and Policy Research</td>
</tr>
<tr>
<td>HAD5780H</td>
<td>Program Planning and Evaluation for Health Services and Policy Research</td>
</tr>
<tr>
<td>HAD5781H</td>
<td>Case Study Research for Health Services, Systems and Policy</td>
</tr>
<tr>
<td>HAD6506H</td>
<td>Assessment in Health Professions Education</td>
</tr>
<tr>
<td>HAD6750H</td>
<td>Advanced Health Economics and Policy Analysis II</td>
</tr>
<tr>
<td>HAD6760H</td>
<td>Introduction to Health Services Research Theory and Methods</td>
</tr>
<tr>
<td>HAD6761H</td>
<td>Health Services Outcomes and Evaluation Comprehensive Course</td>
</tr>
<tr>
<td>HAD6762H</td>
<td>Health Services Organization and Management Comprehensive Course</td>
</tr>
<tr>
<td>HAD6763H</td>
<td>Health Policy Comprehensive Course</td>
</tr>
<tr>
<td>HAD6764H</td>
<td>Health Informatics Research Comprehensive Course</td>
</tr>
<tr>
<td>HAD6765H</td>
<td>Health Technology Assessment Comprehensive Course (Credit/No Credit)</td>
</tr>
<tr>
<td>HAD6770H</td>
<td>Applying Health Services Research Methods (prerequisite: HAD6760H)</td>
</tr>
<tr>
<td>HAD7001H</td>
<td>Reading Course</td>
</tr>
<tr>
<td>JNH5001H</td>
<td>Health Care Settings, Site, and Human Well Being</td>
</tr>
<tr>
<td>JNH5003H</td>
<td>Home and Community Care Knowledge Translation</td>
</tr>
</tbody>
</table>

**Concentration: Quality Improvement and Patient Safety**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD3010H</td>
<td>Fundamentals of Improvement Science</td>
</tr>
<tr>
<td>HAD3020H</td>
<td>Quality Improvement Methods</td>
</tr>
<tr>
<td>HAD3025H</td>
<td>Teaching QI and Patient Safety (prerequisites: HAD3010H, HAD3020H, HAD3040Y*)</td>
</tr>
<tr>
<td>HAD3030H</td>
<td>Concepts and Strategies in Patient Safety</td>
</tr>
<tr>
<td>HAD3040Y</td>
<td>Project Practicum</td>
</tr>
<tr>
<td>HAD3041Y</td>
<td>Design and Methods for Thesis Research</td>
</tr>
<tr>
<td>HAD3050H</td>
<td>Leading and Managing Change</td>
</tr>
<tr>
<td>HAD3060H</td>
<td>Quality Improvement in Health Systems</td>
</tr>
<tr>
<td>HAD3070H</td>
<td>Health Law and Risk Management for Quality Improvement and Patient Safety</td>
</tr>
</tbody>
</table>
### Practicum Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD3080H</td>
<td>External Practicum</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD3090H</td>
<td>The Application of Lean in Healthcare</td>
</tr>
<tr>
<td>HAD4000H</td>
<td>Reading Course — QIPS</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD2005H</td>
<td>Quality Improvement Skills for Healthcare Leaders</td>
</tr>
<tr>
<td>HAD2006H</td>
<td>Accelerating Innovations in Medical Education</td>
</tr>
<tr>
<td>HAD2007H</td>
<td>Leading Health Systems Innovation and Transformation (prerequisite: HAD2004H)</td>
</tr>
<tr>
<td>HAD2008H</td>
<td>Human Factors, Strategy, and Innovation Leadership (prerequisite: HAD2004H)</td>
</tr>
<tr>
<td>HAD2012H</td>
<td>Learning Health Systems: Research Tools, Approaches, and Lessons</td>
</tr>
</tbody>
</table>

### Cross-Listed Courses

These courses are limited to certain program students in Health Policy, Management and Evaluation. Please check the IHPME website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL5300H</td>
<td>Public Health Policy</td>
</tr>
<tr>
<td>HSR1001H</td>
<td>Introduction to Qualitative Methods for Health Services and Policy Research</td>
</tr>
<tr>
<td>HSR1002H</td>
<td>Health Services Research Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>JCV3060H</td>
<td>Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction</td>
</tr>
<tr>
<td>JCV3061H</td>
<td>Advanced Topics in Cardiovascular Sciences — Hormones</td>
</tr>
<tr>
<td>JCV3062H</td>
<td>Advanced Topics in Cardiovascular Sciences — Heart Function</td>
</tr>
<tr>
<td>JCV3063H</td>
<td>Advanced Topics in Cardiovascular Sciences — Vascular</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HAD2013H</td>
<td>Fundamentals of Health Economics and Policy</td>
</tr>
<tr>
<td>HAD2040Y</td>
<td>Systems Innovation and Leadership Project Course (Credit/No Credit) (prerequisites: HAD2001H, HAD2003H, and HAD2004H)</td>
</tr>
</tbody>
</table>

### Concentration: System Leadership and Innovation

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD2001H</td>
<td>Strategic Vision and Planning for Health System Change</td>
</tr>
<tr>
<td>HAD2002H</td>
<td>Research Methods for Evaluating Health System Innovation</td>
</tr>
<tr>
<td>HAD2003H</td>
<td>Leading and Responding to Health Policy and System Change</td>
</tr>
<tr>
<td>HAD2004H</td>
<td>Leadership, Motivation, and Partnering</td>
</tr>
</tbody>
</table>

#### Practicum Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD2010H</td>
<td>Health Systems Leadership Practicum (Individual) (Credit/No Credit)</td>
</tr>
<tr>
<td>HAD2011H</td>
<td>Individual Practicum — Quality Improvement</td>
</tr>
<tr>
<td>HAD2020H</td>
<td>Health Systems Consulting Practicum (Team) (Credit/No Credit)</td>
</tr>
</tbody>
</table>

#### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD2005H</td>
<td>Quality Improvement Skills for Healthcare Leaders</td>
</tr>
<tr>
<td>HAD2006H</td>
<td>Accelerating Innovations in Medical Education</td>
</tr>
<tr>
<td>HAD2007H</td>
<td>Leading Health Systems innovation and Transformation (prerequisite: HAD2004H)</td>
</tr>
<tr>
<td>HAD2008H</td>
<td>Human Factors, Strategy, and Innovation Leadership (prerequisite: HAD2004H)</td>
</tr>
<tr>
<td>HAD2012H</td>
<td>Learning Health Systems: Research Tools, Approaches, and Lessons</td>
</tr>
</tbody>
</table>

### HPME: Health Administration MHSc

#### Master of Health Science

**Program Description**

The MHSc program is geared to health managers and professionals who wish to acquire a graduate education in health administration. The program’s modular format allows learners to complete the degree without interrupting their careers.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME’s additional admission requirements stated below.
• Normally, the equivalent of a University of Toronto B+ average or higher in each of the last two years of an appropriate bachelor’s degree from a recognized university. Applicants are strongly advised to have some prior preparation in quantitative courses such as statistics, accounting, and economics.
• Full-time, relevant work experience.

Program Requirements

• Completion of **10.0 full-course equivalents (FCEs)** as follows:
  o 9.0 FCEs are required subjects, which include a minimum of 1.0 FCE in a field placement.
  o The remaining 1.0 FCE are elective courses.
  o Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

**HPME: Health Administration MHSc**

Courses

Students in the Master of Health Science program may elect to be assessed on a Credit/No Credit basis in courses marked by the symbol ⌒ up to a total of 0.5 FCE.

Required Courses

All courses are offered in modular format unless marked otherwise.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5010H♭♭</td>
<td>Canada's Health System and Health Policy: Part I</td>
</tr>
<tr>
<td>HAD5020H♭♭</td>
<td>Canada's Health System and Health Policy: Part II</td>
</tr>
<tr>
<td>HAD5711H♭♭</td>
<td>Theory and Practice of Strategic Planning and Management in Health Services Organization</td>
</tr>
<tr>
<td>HAD5713H♭♭</td>
<td>Introduction to Health Information Systems</td>
</tr>
<tr>
<td>HAD5721H♭♭</td>
<td>Strategic Management of Quality and Organizational Behaviour in Health Services Organizations</td>
</tr>
<tr>
<td>HAD5723H♭♭</td>
<td>Health Services Accounting</td>
</tr>
<tr>
<td>HAD5724H♭♭</td>
<td>Quantitative Methods for Health Services Management and Policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5725H♭♭</td>
<td>Health Economics</td>
</tr>
<tr>
<td>HAD5731H♭♭</td>
<td>Translating Leadership Into Practice</td>
</tr>
<tr>
<td>HAD5733H♭♭</td>
<td>Health Services Finance</td>
</tr>
<tr>
<td>HAD5741H♭♭</td>
<td>Health Law and Ethics</td>
</tr>
<tr>
<td>HAD5761H♭♭</td>
<td>Introduction to eHealth: Informatics, Innovations, and Information Systems</td>
</tr>
<tr>
<td>HAD5767H♭♭</td>
<td>Health Services Marketing</td>
</tr>
<tr>
<td>HAD5769H♭♭</td>
<td>Human Resources Management in the Health Field</td>
</tr>
<tr>
<td>HAD5770H♭♭</td>
<td>Program Planning and Evaluation</td>
</tr>
<tr>
<td>HAD5800H</td>
<td>The Fundamentals of Health Services Leadership (Credit/No Credit) (prerequisites: all courses in Blocks 1 to 3, plus HAD5725H, HAD5741H, and HAD5769H)</td>
</tr>
<tr>
<td>HAD6010Y*</td>
<td>Health Care Leadership Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>HAD6011H*</td>
<td>Health Care Leadership Practicum Extension (Credit/No Credit)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Elective Courses

Non-modular electives may be taken subject to program approval.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5736H♭♭</td>
<td>Operations Research Tools for Quantitative Health Care Decision Making</td>
</tr>
<tr>
<td>HAD5765H♭♭</td>
<td>Case Studies in Health Policy</td>
</tr>
<tr>
<td>HAD5775H♭♭</td>
<td>Competition, Cooperation, and Strategy in Health Care</td>
</tr>
</tbody>
</table>

**HPME: Health Informatics MHI**

Master of Health Informatics

Program Description

The Master of Health Informatics (MHI) is a professional program which provides graduates with expertise in clinical information and communication technologies (ICTs) required to lead organizational and health system change. The MHI degree program prepares health informaticians to bridge the gaps between clinicians and ICT specialists.

There are two options available to complete the MHI:
• **Regular MHI option**: This is designed for individuals who are not currently in a health informatics profession and are seeking a career in the field. Applicants to this option should not be employed full-time.

• **Executive MHI option**: This is designed for individuals who are currently employed in the health informatics profession and are interested in pursuing leadership positions and other career development. Applicants to this option must be employed in the health informatics sector and have an executive sponsor at their place of employment.

### Regular MHI Option

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME’s additional admission requirements stated below.
- Appropriate bachelor’s degree from a recognized university. Eligible undergraduate degrees include those in a health sciences or social sciences specialty, Regulated Health Professions in Ontario, or a computer science or information science specialty with the equivalent of a minimum mid-B average in the last academic year.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Successful applicants normally have relevant professional experience as a health services professional (e.g., manager or administrator) or health sciences/clinical practitioner with demonstrated basic literacy and/or programming skills in computer applications relevant to the health sector, or a computer or information technician within a health-care setting or health software vendor.

#### Program Requirements

- Completion of **10.0 full-course equivalents (FCEs)** as follows:
  - Required coursework (7.5 FCEs)
  - Elective coursework (0.5 FCE)
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  - A four-month, full-time practicum or field placement (MHI2005Y; 2.0 FCEs).
- Degree requirements will be completed in 16 months across four consecutive sessions.

Students may elect to be assessed on a Credit/No Credit basis in courses marked by the symbol ⎯ up to a total of 0.5 FCE.

<table>
<thead>
<tr>
<th>Required Courses for the Regular MHI Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5010H</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHI1001H</td>
<td>Information and Communication Technology in Health Informatics</td>
</tr>
<tr>
<td>MHI1002H</td>
<td>Complexity of Clinical Care</td>
</tr>
<tr>
<td>MHI2001H</td>
<td>Fundamentals of Health Informatics</td>
</tr>
<tr>
<td>MHI2002H</td>
<td>Emergent Topics in Health Informatics</td>
</tr>
<tr>
<td>MHI2003H</td>
<td>Emerging Applications in Consumer, Public, and Global Health Informatics</td>
</tr>
<tr>
<td>MHI2004H</td>
<td>Human Factors and Systems Design in Health Care</td>
</tr>
<tr>
<td>MHI2006H</td>
<td>Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)</td>
</tr>
<tr>
<td>MHI2007H</td>
<td>Quantitative Skills in Health Informatics</td>
</tr>
<tr>
<td>MHI2008H</td>
<td>Project Management for Health Informatics</td>
</tr>
<tr>
<td>MHI2009H</td>
<td>Evaluation Methods for Health Informatics</td>
</tr>
<tr>
<td>MHI2011H</td>
<td>Performance Measurements in Health Care: Theory and Application</td>
</tr>
<tr>
<td>MHI2017H</td>
<td>Systems Analysis and Process Innovation in Healthcare</td>
</tr>
<tr>
<td>MHI2018H</td>
<td>Knowledge Management and Systems</td>
</tr>
<tr>
<td>MHI2019H</td>
<td>Health Information Systems, Services, and Design</td>
</tr>
</tbody>
</table>

### Practicum Course

- MHI2005Y Practicum Placement

### Elective Courses

Students are encouraged to select an elective that allows them to focus on their individual areas of interest in health informatics. For this reason, the MHI program does not impose a selection of electives. Students are free to choose from all graduate courses across all disciplines at the University of Toronto. All selections are subject to approval in advance by the Program Director and the IHPME Chair.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHI2010H</td>
<td>Extended Health Informatics Practicum</td>
</tr>
<tr>
<td>MHI2012H</td>
<td>Introduction to Big Data for Health: Foundations and Methodologies</td>
</tr>
<tr>
<td>MHI2013H</td>
<td>Data Visualization in Health Care</td>
</tr>
<tr>
<td>MHI3000H</td>
<td>Independent Reading for Health Informatics</td>
</tr>
</tbody>
</table>

### Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)
Time Limit
3 years full-time

Executive MHI Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPME’s additional admission requirements stated below.
- Appropriate bachelor’s degree from a recognized university. Eligible undergraduate degrees include those in a health sciences or social sciences specialty, Regulated Health Professions in Ontario, or a computer science or information science specialty with the equivalent of a minimum mid-B average in the last academic year.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Successful applicants normally have relevant professional experience as a health services professional (e.g., manager or administrator) or health sciences/clinical practitioner with demonstrated basic literacy and/or programming skills in computer applications relevant to the health sector, or a computer or information technician within a health care setting or health software vendor.
- Additional requirements for the executive MHI option are as follows:
  o active employment in a health informatics role or capacity; and
  o an executive sponsor at the site of employment, committed to supervising and supporting the student’s program including the health informatics project; see program requirements below.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  o Required coursework (7.5 FCEs)
  o Elective coursework (1.0 FCE)
  o Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  o A four-month, employer-sponsored Health Informatics Project (MHI2015Y; 1.5 FCEs).
- The executive MHI degree requirements will be completed in 22 months across six consecutive sessions.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5010H</td>
<td>Canada’s Health System and Health Policy: Part 1</td>
</tr>
<tr>
<td>MHI1001H</td>
<td>Information and Communication Technology in Health Informatics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHI1002H</td>
<td>Complexity of Clinical Care</td>
</tr>
<tr>
<td>MHI2001H</td>
<td>Health Informatics I</td>
</tr>
<tr>
<td>MHI2002H</td>
<td>Health Informatics II</td>
</tr>
<tr>
<td>MHI2003H</td>
<td>Emerging Applications in Consumer, Public and Global Health Informatics</td>
</tr>
<tr>
<td>MHI2004H</td>
<td>Human Factors and Systems Design in Health Care</td>
</tr>
<tr>
<td>MHI2006H</td>
<td>Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)</td>
</tr>
<tr>
<td>MHI2007H</td>
<td>Quantitative Skills in Health Informatics</td>
</tr>
<tr>
<td>MHI2008H or HAD5731H or HAD5733H</td>
<td>Project Management for Health Informatics or Translating Leadership into Practice or Health Services Finance</td>
</tr>
<tr>
<td>MHI2009H</td>
<td>Evaluation Methods for Health Informatics</td>
</tr>
<tr>
<td>MHI2011H</td>
<td>Performance Measurements in Health Care: Theory and Application</td>
</tr>
<tr>
<td>MHI2017H</td>
<td>Systems Analysis and Process Innovation in Healthcare</td>
</tr>
<tr>
<td>MHI2018H</td>
<td>Knowledge Management and Systems</td>
</tr>
<tr>
<td>MHI2019H</td>
<td>Health Information Systems, Services, and Design</td>
</tr>
<tr>
<td>MHI3000H</td>
<td>Independent Reading for Health Informatics</td>
</tr>
</tbody>
</table>

Practicum Course

MHI2015Y | Health Informatics Project

Elective Courses

Students are encouraged to select an elective that allows them to focus on their individual areas of interest in health informatics. For this reason, the MHI program does not impose a selection of electives. Students are free to choose from all graduate courses across all disciplines at the University of Toronto. All selections are subject to approval in advance by the Program Director and the IHPME Chair.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHI2012H</td>
<td>Introduction to Big Data for Health: Foundations and Methodologies</td>
</tr>
<tr>
<td>MHI2013H</td>
<td>Data Visualization in Health Care</td>
</tr>
<tr>
<td>MHI2016H</td>
<td>Health Informatics Project Extension</td>
</tr>
<tr>
<td>MHI3000H</td>
<td>Independent Reading for Health Informatics</td>
</tr>
</tbody>
</table>
Program Length

6 sessions full-time (S/F/W/S/F/W)

Time Limit

3 years full-time
History

History: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

History

MA and PhD

• Fields by Chronology or Geography:
  o African History;
  o American History;
  o Atlantic World History;
  o British and Irish History;
  o Canadian History;
  o East Asian History;
  o European History;
  o Latin American and Caribbean History;
  o Medieval History;
  o Mediterranean and Middle Eastern History;
  o Russian History;
  o South Asian History;
  o Southeast Asian History

• Fields by Theme:
  o Contemporary International History (MA only);
  o Cultural and Intellectual History;
  o Food History;
  o History of Conflict, Violence, and Genocide;
  o History of Economy, Technology, and Society;
  o History of Empire, Colonialism, and Indigeneity;
  o History of Gender, Sex, and Sexualities;
  o History of Medicine;
  o History of Migration/Diaspora;
  o History of Religion and Society;
  o History of State, Politics, and Law;
  o International Relations;
  o Social History

Overview

The Department of History offers a broadly diversified program of graduate studies leading to the Master of Arts and Doctor of Philosophy degrees. There are opportunities to study and research several geographic, chronological, and thematic areas of history. Visit the departmental website for descriptions of specific fields.

The University of Toronto also offers rich resources outside the department to support the study of history. The Robarts Research Library, unrivalled in Canada and among the leading university libraries in North America, provides a foundation for a wide range of study. Specialized collections are located elsewhere in the University including in a number of centres and research institutes. The Centre for Medieval Studies and the Pontifical Institute of Mediaeval Studies have particularly strong resources for European and British medieval history. The Munk School of Global Affairs and Public Policy; the Institute for the History and Philosophy of Science and Technology; the Centre for Criminology and Sociolegal Studies; the Institute for Urban and Community Studies; as well as the Centre for European, Russian, and Eurasian Studies afford additional opportunities for interdepartmental work. The department participates in a number of interdisciplinary collaborative specializations.

Contact and Address

Web: history.utoronto.ca
Email: history.gradadmin@utoronto.ca
Telephone: (416) 978-3369
Fax: 416-978-6647

Department of History
University of Toronto
Sidney Smith Hall
Room 2074, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Book History and Print Culture
  o History, MA, PhD
• Contemporary East and Southeast Asian Studies
  o History, MA
• Diaspora and Transnational Studies
  o History, MA, PhD
• Ethnic, Immigration and Pluralism Studies
  o History, MA, PhD
• Food Studies
  o History, MA, PhD

• Jewish Studies
  o History, MA, PhD
• Sexual Diversity Studies
  o History, MA, PhD
• South Asian Studies
  o History, MA, PhD
• Women and Gender Studies
  o History, MA, PhD

Full Members

Anastakis, Dimitry - PhD
Austin, Robert - BA, MA, PhD
Bartlett, Kenneth - BA, MA, PhD
Bender, Daniel Eric - BA, PhD
Bergen, Doris - MA, PhD
Bertram, Laurie - MA, PhD
Birla, Ritu - BA, MPH, PhD
Members Emeriti

Accinelli, Robert - BA, MA, PhD
Berger, Carl - BA, MA, PhD
Berman, William - BA, MA, PhD
Blanchard, Peter - BA, PhD
Callahan, William - AB, MA, PhD
Davis, Natalie - BA, MA, PhD
Dent, Julian - BA, MA, PhD
Dyck, Harvey - BA, MA, PhD
Estes, James - MA, PhD
Finlayson, Michael - BA, PhD
Goffart, Walter - AB, AM, PhD
Grendler, Paul - BA, MA, PhD
Israel, Milton - BS, MA, PhD
Johnson, Robert - BA, PhD
Klein, Martin - BS, MA, PhD
Kornberg, Jacques - BA, PhD
Levere, Trevor - BA, MA, DPhil
Lloyd, Trevor - BA, MA, DPhil
Marrus, Michael - BA, MA, LLM, PhD
Murray, Alexander - BA, PhD
Nelson, Wendy - BS, MHSc
Raby, David - BA, PhD
Robertson, Ian - BA, MA, PhD
Robson, Ann - BA, MA, PhD
Wagle, Narendra - BA, MA, PhD

Associate Members

Mishler, Max - PhD
Topouzova, Lilia - BA, MA, PhD

History: History MA

Master of Arts

Program Description

The Department of History offers a broadly diversified program of graduate studies leading to the Master of Arts degree. There are opportunities to study and research several geographic, chronological, and thematic areas of history. Visit the departmental website for descriptions of specific fields. The requirements vary for the field in Contemporary International History; see the admission and program requirements below.

The MA program can be taken on a full-time or part-time basis.
MA Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of History’s additional admission requirements stated below.
• An appropriate bachelor’s degree from a recognized university with at least a B+ standing.
• Successful completion of at least 6.0 full-course equivalents (FCEs) in history. Applicants without adequate history training may be required to complete an appropriate number of undergraduate history courses before being considered for admission. In rare cases, an applicant may be admitted to the MA program but will be required to do one or two courses in addition to the MA program requirements.
• In addition to the School of Graduate Studies online application form, applicants must submit:
  o an Application Information Form
  o three letters of recommendation
  o a 500-word specific research proposal outlining a precise field and area of historical investigation
  o a writing sample of no more than 3,000 words.
• Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with scores of at least:
  o paper-based TOEFL exam: 600 with 5 on the Test of Written English (TWE)
  o Internet-based TOEFL exam: 100/120 with 22/30 on the writing and speaking sections.

Program Requirements

• Students may complete the MA by:
  o coursework and research paper or
  o coursework and thesis (with special permission).
• Students must achieve at least an overall B average in their courses to maintain standing.
• Students must also demonstrate competency in a language other than English, to be assessed in a manner approved by the Associate Chair (Graduate) or designate.

Coursework and Research Paper

• Students must successfully complete a total of 3.5 full-course equivalents (FCEs) as follows:
  o 0.5 FCE: HIS1997H
  o 1.0 FCE: HIS2000Y® MA essay
  o 2.0 FCE: HIS courses. Normally, up to 1.0 FCE may be taken outside the Department of History with the approval of the Associate Chair, Graduate.
• Full-time MA students are expected to complete all degree requirements within 12 months of entering the program.

Coursework and Thesis

• Students must successfully complete a total of 2.0 full-course equivalents (FCEs) as follows:
  o 0.5 FCE: HIS1997H
  o 1.5 FCE: present an MA thesis.
• The thesis MA might take longer than the coursework MA. The thesis must be presented by full-time students within three years of entering the program; part-time students must present within six years of entering the program.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Course that may continue over a program. The course is graded when completed.

Field: Contemporary International History

The field in Contemporary International History (CIH) focuses on the historical roots and genealogies of contemporary international issues. It emphasizes the development of research and analytical skills that will enrich decision-making in an increasingly interconnected, but tension-filled global environment. The field is designed to prepare students in research, analytical, and communication skills for decision-making in non-academic careers in government, international organizations, non-governmental organizations, media, business and finance, law, and the cultural sector.

The coursework-plus-thesis option is not permitted in this field.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of History’s additional admission requirements stated below.
• An appropriate bachelor’s degree, or equivalent, from a recognized university with successful completion of at least 6.0 full-course equivalents (FCEs) in History with a B+ average.
• A B+ average (grade point average of 3.3), or equivalent, in the final 5.0 FCEs of the BA.
• In addition to the School of Graduate Studies online application form, applicants must submit:
  o an Application Information Form
  o three letters of recommendation
  o a 500-word specific research proposal outlining a precise field and area of historical investigation
  o a writing sample of no more than 3,000 words.
• Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a
minors. Major fields should coincide with the subject area(s) that the student has chosen for the thesis. Minors should be in different areas. The comprehensive field examinations consist of a written examination in each field and a common oral examination covering all fields. Students are required to take their field examinations by the spring of Year 2, but they are strongly advised to take them as soon as possible after the completion of their coursework. Examinations are held in January and April. Examinations cannot be postponed beyond the spring of Year 2 without permission of the Associate Chair, Graduate. The department's website lists the fields offered.

**Language requirements** vary with the student's major area of study. If not already so qualified, a student must qualify in one language other than English by the beginning of Year 2 and may be asked to qualify in other program-related languages. As part of their program, students must also demonstrate competency in a language other than English, to be assessed in a manner approved by the Associate Chair (Graduate) or designate.

**Residence requirement.** Residence means students must be in such geographical proximity as to be able to visit the campus regularly and participate fully in the University's activities associated with the program. PhD students must maintain geographical proximity to the campus until they have passed their field examinations but no longer than a period of two years.

**Comprehensive examinations.** At the beginning of their programs, students consult with their supervisor and the Associate Chair, Graduate to determine their fields. Two options are available: two majors or one major and two minors. Major fields should coincide with the subject area(s) that the student has chosen for the thesis. Minors should be in different areas. The comprehensive field examinations consist of a written examination in each field and a common oral examination covering all fields. Students are required to take their field examinations by the spring of Year 2, but they are strongly advised to take them as soon as possible after the completion of their coursework. Examinations are held in January and April. Examinations cannot be postponed beyond the spring of Year 2 without permission of the Associate Chair, Graduate. The department's website lists the fields offered.

**Language requirements** vary with the student's major area of study. If not already so qualified, a student must qualify in one language other than English by the beginning of Year 2 and may be asked to qualify in other program-related languages. As part of their program, students must also demonstrate competency in a language other than English, to be assessed in a manner approved by the Associate Chair (Graduate) or designate.

**Residence requirement.** Residence means students must be in such geographical proximity as to be able to visit the campus regularly and participate fully in the University's activities associated with the program. PhD students must maintain geographical proximity to the campus until they have passed their field examinations but no longer than a period of two years.

**Comprehensive examinations.** At the beginning of their programs, students consult with their supervisor and the Associate Chair, Graduate to determine their fields. Two options are available: two majors or one major and two minors. Major fields should coincide with the subject area(s) that the student has chosen for the thesis. Minors should be in different areas. The comprehensive field examinations consist of a written examination in each field and a common oral examination covering all fields. Students are required to take their field examinations by the spring of Year 2, but they are strongly advised to take them as soon as possible after the completion of their coursework. Examinations are held in January and April. Examinations cannot be postponed beyond the spring of Year 2 without permission of the Associate Chair, Graduate. The department's website lists the fields offered.

**Language requirements** vary with the student's major area of study. If not already so qualified, a student must qualify in one language other than English by the beginning of Year 2 and may be asked to qualify in other program-related languages. As part of their program, students must also demonstrate competency in a language other than English, to be assessed in a manner approved by the Associate Chair (Graduate) or designate.
related languages. All language requirements are subject to the approval of the Associate Chair, Graduate.

- **Thesis**: When all of the above requirements are completed, the candidate will proceed to write the PhD thesis and defend it at a Doctoral Final Oral Examination. The thesis must be a piece of original scholarship, approximately 350 pages (90,000 words) in length, exclusive of notes and bibliography. Thesis preparation is guided by a committee consisting of the major supervisor and two other faculty members. The thesis must be presented within six years of first enrolment in the full-time PhD program.

### Program Length

- **4 years**

### Time Limit

- **6 years**

### PhD Program (Direct-Entry)

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of History's additional admission requirements stated below.
- The closing date for applications to the PhD program is January 15. Later applications will be considered only in exceptional circumstances.
- Exceptional applicants may enter the PhD program by direct entry from the BA with an A– average or better.
- Applicants must satisfy the department of their ability to do independent research at an advanced level.
- In addition to the School of Graduate Studies online application form, applicants must submit:
  - an Application Information Form
  - three letters of recommendation
  - a 500-word specific research proposal outlining a precise field and area of historical investigation
  - a writing sample of no more than 6,000 words.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English must demonstrate proficiency in the English language through the successful completion of a recognized English-language proficiency examination as outlined in the School of Graduate Studies General Regulations.

### Program Requirements

- **Coursework.** By direct entry: students must successfully complete a total of 4.5 full-course equivalents (FCEs), 0.5 of which must be either HIS1997H or HIS1201H. Students must maintain an A– average in their first 2.0 FCEs in order to continue in the program.
- **Residence requirement.** Residence means students must be in such geographical proximity as to be able to visit the campus regularly and participate fully in the University's activities associated with the program. PhD students must maintain geographical proximity to the campus until they have passed their field examinations but no longer than a period of two years.
- **Comprehensive examinations.** At the beginning of their programs, students consult with the Associate Chair, Graduate to determine their fields, and students will be assigned advisors. Two options are available: two majors or one major and two minors. Major fields should coincide with the subject area(s) that the student has chosen for the thesis. Minors should be in different areas. The comprehensive field examinations consist of a written examination in each field and a common oral examination covering all fields. Students are required to take their field examinations by the spring of Year 2, but they are strongly advised to take them as soon as possible after the completion of their coursework. Examinations are held in January and April. Examinations cannot be postponed beyond the spring of Year 2 without permission of the Associate Chair, Graduate. The department's website lists the fields offered.
- **Language requirements** vary with the student’s major area of study. If not already so qualified, a student must qualify in one language other than English by the beginning of Year 2 and may be asked to qualify in other program-related languages. All language requirements are subject to the approval of the Associate Chair, Graduate.
- **Thesis**: When all of the above requirements are completed, the candidate will proceed to write the PhD thesis and defend it at a Doctoral Final Oral Examination. The thesis must be a piece of original scholarship, approximately 350 pages (90,000 words) in length, exclusive of notes and bibliography. Thesis preparation is guided by a committee consisting of the major supervisor and two other faculty members. The thesis must be presented within seven years of first enrolment in the direct-entry PhD.

### Program Length

- **5 years**

### Time Limit

- **7 years**

### History: History MA, PhD Courses

Not all courses are offered every year. Please consult the department's list of current course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS1001H</td>
<td>Topics in History</td>
</tr>
<tr>
<td>HIS1003H</td>
<td>Theory and History</td>
</tr>
<tr>
<td>HIS1004H</td>
<td>History and Biopolitics</td>
</tr>
<tr>
<td>HIS1007H</td>
<td>Theories, Histories, Imaginaries: Themes in Technoscience</td>
</tr>
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<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>HIS1008H</td>
<td>The Practice of Public History and Archival Research</td>
</tr>
<tr>
<td>HIS1009H</td>
<td>Empire and Governmentality: Economy, Culture, and Liberal Governance</td>
</tr>
<tr>
<td>HIS1010H</td>
<td>New Historiographies of Capitalism: Globality and Making Space, Time, Subjects</td>
</tr>
<tr>
<td>HIS1011H</td>
<td>Queer and Trans Oral History</td>
</tr>
<tr>
<td>HIS1013H</td>
<td>Intellectuals and Decolonization</td>
</tr>
<tr>
<td>HIS1014H</td>
<td>Neoliberalism in North America</td>
</tr>
<tr>
<td>HIS1015H</td>
<td>Oral History Theory and Practice</td>
</tr>
<tr>
<td>HIS1016H</td>
<td>Historical Readings in Gender and Sexuality</td>
</tr>
<tr>
<td>HIS1019H</td>
<td>Science, Nature, and Empire</td>
</tr>
<tr>
<td>HIS1020H</td>
<td>Cultural Theory/Cultural History</td>
</tr>
<tr>
<td>HIS1031H</td>
<td>Images as History: Photography, Historical Method, and Conceptualizing Visuality</td>
</tr>
<tr>
<td>HIS1032H</td>
<td>Modernity and Its Visual Cultures</td>
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<tr>
<td>HIS1040H</td>
<td>Maps in History: Power and Identity, Conflict and Imagination</td>
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<tr>
<td>HIS1104H</td>
<td>Natives and Empires: Colonial History of the Americas, 1492–1800</td>
</tr>
<tr>
<td>HIS1105H</td>
<td>Colonial North America, 1600–1783</td>
</tr>
<tr>
<td>HIS1106H</td>
<td>Topics in Canadian Social History</td>
</tr>
<tr>
<td>HIS1107H</td>
<td>Religion, Culture, and Society in Canada (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1113H</td>
<td>Politics and Society in North American History</td>
</tr>
<tr>
<td>HIS1117H</td>
<td>Canada: Colonialism/Postcolonialism</td>
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<tr>
<td>HIS1118H</td>
<td>Canada By Treaty: Alliances, Title Transfers, and Land Claims</td>
</tr>
<tr>
<td>HIS1128H</td>
<td>Canada and Transnational History</td>
</tr>
<tr>
<td>HIS1142Y</td>
<td>Canadian Foreign Relations, 1940–2003 (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1168H</td>
<td>History of the Sex Trade in Canadian and Comparative Contexts</td>
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<tr>
<td>HIS1180H</td>
<td>Race in the USA and Canada</td>
</tr>
<tr>
<td>HIS1200H</td>
<td>Readings in European Intellectual History</td>
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<tr>
<td>HIS1203H</td>
<td>Jus Commune</td>
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<tr>
<td>HIS1204H</td>
<td>Topics in Medieval Church History</td>
</tr>
<tr>
<td>HIS1213H</td>
<td>Medieval Institutes of Perfection (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1215H</td>
<td>Social Change in Medieval England, 1154–1279</td>
</tr>
<tr>
<td>HIS1221H</td>
<td>Topics in Early Modern European Social History</td>
</tr>
<tr>
<td>HIS1228H</td>
<td>Revolutions in History: The Annales School in Context</td>
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<tr>
<td>HIS1230H</td>
<td>The Sexes in the Western World, 1450–1650</td>
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<tr>
<td>HIS1232H</td>
<td>European Colonialism, 1870–1970: A Comparative History</td>
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<tr>
<td>HIS1233H</td>
<td>Colonial Urbanism in the Mediterranean World, 1800–1950</td>
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<td>HIS1234H</td>
<td>Readings in Early Modern French History</td>
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<tr>
<td>HIS1235H</td>
<td>Histories in the Mediterranean: From Braudel to Post-Colonialism</td>
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<tr>
<td>HIS1237H</td>
<td>France: 1870–1968</td>
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<tr>
<td>HIS1268H</td>
<td>The Holocaust and World War II</td>
</tr>
<tr>
<td>HIS1269H</td>
<td>The Social History of Medicine in the Nineteenth and Twentieth Centuries (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1270H</td>
<td>History of Psychiatry and Psychiatric Illness (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1272H</td>
<td>Topics in Twentieth-Century European History</td>
</tr>
<tr>
<td>HIS1275H</td>
<td>Imperial Germany, 1871–1918</td>
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<tr>
<td>HIS1278H</td>
<td>Topics in 20th C German History</td>
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<tr>
<td>HIS1279H</td>
<td>World War II in East Central Europe (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1281H</td>
<td>History of Real Socialism</td>
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<tr>
<td>HIS1283H</td>
<td>Crusades, Conversion, and Colonization in the Medieval Baltic (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1286H</td>
<td>Categories of Imperial Russian Social History</td>
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<tr>
<td>HIS1287H</td>
<td>Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1288H</td>
<td>Russia’s Empire</td>
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<tr>
<td>HIS1289H</td>
<td>The Cold War Through Its Archives</td>
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<tr>
<td>HIS1289Y</td>
<td>Twentieth Century Ukraine</td>
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<tr>
<td>HIS1290H</td>
<td>Topics in Imperial Russian History</td>
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<td>HIS1293Y</td>
<td>Kievan Rus’ (joint graduate/undergraduate)</td>
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<td>HIS1296H</td>
<td>Stalinism and After: Beyond Cold War History</td>
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<tr>
<td>HIS1301H</td>
<td>History of Food and Drink</td>
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<tr>
<td>HIS1416H</td>
<td>Early Modern English Popular Culture, 1500–1800</td>
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<tr>
<td>HIS1435H</td>
<td>Studies in Victorian Society</td>
</tr>
<tr>
<td>HIS1440H</td>
<td>Irish Nationalism in Canada, 1858–1870 (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1511H</td>
<td>History and Present-Day Policy Analysis</td>
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<tr>
<td>HIS1531H</td>
<td>American Political History Since 1877</td>
</tr>
<tr>
<td>HIS1532H</td>
<td>American Foreign Policy in the Cold War</td>
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<td>Course Title</td>
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<tr>
<td>HIS1533H</td>
<td>Gender and International Relations (joint graduate/undergraduate)</td>
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<tr>
<td>HIS1538H</td>
<td>Reading in U.S. History</td>
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<tr>
<td>HIS1552H</td>
<td>Historical Perspectives on Gender and Migration, 1500–2010</td>
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<tr>
<td>HIS1620H</td>
<td>Asian Diasporas</td>
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<tr>
<td>HIS1662H</td>
<td>Rethinking Modernity Through Japan</td>
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<tr>
<td>HIS1664H</td>
<td>Religion and Society in Southeast Asia</td>
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<tr>
<td>HIS1667H</td>
<td>Transnational Gender Histories</td>
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<tr>
<td>HIS1673H</td>
<td>Critical Historiography of Late Imperial and Modern China</td>
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<tr>
<td>HIS1675H</td>
<td>Imperial Circulation and Diasporic Flows in the British Empire</td>
</tr>
<tr>
<td>HIS1677H</td>
<td>Empire and Nation in Modern East Asia</td>
</tr>
<tr>
<td>HIS1678H</td>
<td>War and Memory in Twentieth-Century East Asia</td>
</tr>
<tr>
<td>HIS1702H</td>
<td>Colonial Violence: Comparative Histories</td>
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<tr>
<td>HIS1704H</td>
<td>Colloquium in Latin American and Caribbean History</td>
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<tr>
<td>HIS1705H</td>
<td>Trends in Women and Gender History in the Global South</td>
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<tr>
<td>HIS1707H</td>
<td>Topics in African History</td>
</tr>
<tr>
<td>HIS1708H</td>
<td>Labour in the Age of Imperialism</td>
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<tr>
<td>HIS1712H</td>
<td>Topics on the History of Ethiopia</td>
</tr>
<tr>
<td>HIS1725H</td>
<td>Topics in Latin American History: Race, Gender, and Citizenship</td>
</tr>
<tr>
<td>HIS1784H</td>
<td>The Islamic Revolution</td>
</tr>
<tr>
<td>HIS1785H</td>
<td>International Relations in the Middle East</td>
</tr>
<tr>
<td>HIS1800H</td>
<td>Global Histories of the Archives</td>
</tr>
<tr>
<td>HIS1802H</td>
<td>Slavery in North America (joint undergraduate/graduate)</td>
</tr>
<tr>
<td>HIS1805H</td>
<td>Human Rights and Empire (exclusion: HIS1860H)</td>
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<tr>
<td>HIS1806H</td>
<td>Histories of the Carceral State</td>
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<tr>
<td>HIS1810H</td>
<td>Indigenous Economies and Imperialism</td>
</tr>
<tr>
<td>HIS1820H</td>
<td>Law, Space, and History</td>
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<tr>
<td>HIS1825H</td>
<td>Changing Skylines: (Re)mapping Urban History in the Global Age</td>
</tr>
<tr>
<td>HIS1830H</td>
<td>Critical Approaches to Historical Anthropology</td>
</tr>
<tr>
<td>HIS1840H</td>
<td>Empires in World War II</td>
</tr>
<tr>
<td>HIS1850H</td>
<td>Queer Archives and LGBTQ History</td>
</tr>
<tr>
<td>HIS1860H</td>
<td>Global Rights: A Critical History</td>
</tr>
<tr>
<td>HIS1870H</td>
<td>History on Film/Film on History</td>
</tr>
<tr>
<td>HIS1880H</td>
<td>Digital History</td>
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<tr>
<td>HIS1890H</td>
<td>Regimes of Value</td>
</tr>
<tr>
<td>HIS1900H</td>
<td>History in International Affairs</td>
</tr>
<tr>
<td>HIS1901H</td>
<td>Approaches and Methodologies in Contemporary International History</td>
</tr>
<tr>
<td>HIS1997H</td>
<td>The Practice of History (Credit/No Credit)</td>
</tr>
<tr>
<td>HIS1998H</td>
<td>Reading Course</td>
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<tr>
<td>HIS1999H</td>
<td>Reading Course</td>
</tr>
<tr>
<td>HIS2000Y</td>
<td>Directed Research</td>
</tr>
<tr>
<td>JHL1282H</td>
<td>Comparative Totalitarian Culture</td>
</tr>
<tr>
<td>JHL1680H</td>
<td>Revolutionary Women’s Cultures in East Asia, Early to Mid 20th Century</td>
</tr>
<tr>
<td>JHP1289Y</td>
<td>Twentieth-Century Ukraine (joint graduate/undergraduate)</td>
</tr>
<tr>
<td>JHP2351Y</td>
<td>The People From Nowhere</td>
</tr>
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Courses in Other Departments Taught by History Faculty

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<tr>
<th>Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>COL5027H</td>
<td>Memory, Trauma, and History</td>
</tr>
<tr>
<td>MST1110H</td>
<td>Diplomatics and Diplomatic Editing</td>
</tr>
<tr>
<td>MST3205H</td>
<td>Violence in Medieval Society</td>
</tr>
<tr>
<td>MST3225Y</td>
<td>Jews and Christians in Medieval and Renaissance Europe</td>
</tr>
</tbody>
</table>

Other Departments

Students may take courses from other departments for graduate history credit with permission of the Associate Chair, Graduate. Interested students should consult the appropriate calendar entries and departmental websites for current course offerings.
History and Philosophy of Science and Technology

HPST: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

History and Philosophy of Science and Technology

MA and PhD

- Fields:
  - History of Mathematics and Physical Sciences;
  - History of Medicine and Life Sciences;
  - History of Technology;
  - Philosophy of Science

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - History and Philosophy of Science and Technology, MA, PhD

- Sexual Diversity Studies
  - History and Philosophy of Science and Technology, MA, PhD

Overview

The Institute for the History and Philosophy of Science and Technology (IHPST) conducts research, offers advanced studies programs, and serves as a focus for University-wide interest in its field.

Courses are open to all graduate students and are suitable complements for specialists in science or the humanities. Students are encouraged to participate in the IHPST colloquia, which are open to the University of Toronto community.

Contact and Address

Web: hps.utoronto.ca
Email: ihps.info@utoronto.ca
Telephone: (416) 978-5397
Fax: (416) 978-3003

Institute for the History and Philosophy of Science and Technology (IHPST)
University of Toronto
Old Victoria College
Room 316, 91 Charles Street West
Toronto, Ontario M5S 1K7
Canada

Full Members

Baigrie, Brian - BA, MA, PhD
Berkovitz, Joseph - BSc, MA, PhD
Birn, Anne-Emmanuelle - BA, MA, DSc
Chakravartty, Anjan - BSc, MPH, MA, PhD
Dacome, Lucia - BA, MPH, PhD
Dyck, Erika - BA, MA, PhD
Fehige, Yifat - BSc, MPH, MTh, DTh, PhD
Fraser, Craig - BA, MA, PhD
Gingras, Yves - BSc, MSc, PhD
Goldenberg, Maya - BA, MA, PhD
Hoover, Kevin - AB, BA, DPhil
Huber, Franz - MA, PhD
Jones-Imhotep, Edward - BA, PhD (Director)
Katzav, Joel - BSc, MA, PhD
Krementsov, Nikolai - PhD
Lightman, Bernard - BA, MA, PhD
Misak, Cheryl - BA, MA, DPhil, FRSC
Peacock, Mark - BA, MA, PhD
Richmond, Scott - BA, PhD
Satsuka, Shiho - BA, BA, MA, PhD
Seager, William Edward - BA, MA, PhD
Smith, Brian Cantwell - BS, MS, PhD
Snobelen, Stephen - BA, MA, MPH, PhD
Slovey, Mark - BA, MA, AM, PhD
Upshur, Ross Edward - BA, MA, MSc, MD
Vicedo Castello, Marga - BA, MA, PhD, PhD
Walsh, Denis - BA, BSc, MPH, PhD, PhD
Woods, Rebecca - BA, MA, PhD
Yeang, Chen-Pang - BS, SM, PhD, ScD

Members Emeriti

Brown, James - BA, MA, PhD, FRSC
Thompson, Paul - BA, MA, PhD

Associate Members

Berkhout, Suze Gillian - BSc
Mitchell, Mary - BA, BA, JD, MA, MA, PhD, PhD
Reaume, Geoffrey - BA, MA, PhD
Schotte, Margaret - AB, MA, MA, PhD
Steigerwald, Joan - BA, MA, PhD
HPST: History and Philosophy of Science and Technology MA

Master of Arts

Program Description

Admission to the MA is highly selective and competitive. Acceptance is based on a combination of grades, references, academic and professional accomplishments, areas of interest, and a sample of written work. The IHPST website contains detailed instructions for completing admission applications. Applications must be accompanied by transcripts, a statement of interest, letters of reference, a curriculum vitae, and a writing sample.

Applicants who wish to take one or more of the courses offered by IHPST as non-degree students should apply for admission as Special Students. The application procedures are the same as for those of the MA program, but the deadline for applications is May 1.

The MA program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPST’s additional admission requirements stated below.

• A bachelor’s degree from a recognized university with an average grade of at least B+ in the final two years of undergraduate work. While the majority of accepted students exceed this standard, the very broad scope of the field and the variety of fruitful approaches to it also imply that many different backgrounds are appropriate. Accordingly, grades are only one criterion used to judge applicants.

• Applications must be accompanied by a 300- to 500-word statement of interest indicating the applicant’s areas of interest in history and/or philosophy of science and technology at the graduate level. A writing sample of no more than 3,000 words (not to exceed 20 pages) is required.

• Application deadline is January 15 of every year.

• Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must submit results of the Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) with the following minimum scores:
  o Paper-based TOEFL: 580 and 5 on the TWE
  o Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.

Program Requirements

• Coursework. Students must complete a minimum of 3.0 full-course equivalents (FCEs). A student’s curriculum is arranged in consultation with the student’s faculty advisor and the Director of Graduate Studies. Students make course choices consistent with a commitment to either:
  o One of the three history fields (History of Mathematics and Physical Sciences; History of Medicine and Life Sciences; History of Technology), or
  o The philosophy field (Philosophy of Science).

• Students in a history field must:
  o Complete HPS1000H Introduction to the History and Philosophy of Science and Technology (0.5 FCE) in the first session
  o Complete 1.0 FCE from the HPS 2000 series
  o Complete 0.5 FCE from the HPS 3000 series
  o Complete elective courses (1.0 FCE)
  o Demonstrate a reading knowledge of French or German; language instruction courses are not counted in the 3.0 FCEs required for the degree.

• Students in the philosophy field must:
  o Complete HPS1000H Introduction to the History and Philosophy of Science and Technology (0.5 FCE) in the first session
  o Complete 0.5 FCE from the HPS 2000 series
  o Complete 1.0 FCE from the HPS 3000 series
  o Complete elective courses (1.0 FCE)
  o Demonstrate proficiency in introductory logic, a reading knowledge of French, or a reading knowledge of German; logic and language instruction courses are not counted in the 3.0 FCEs required for the degree.

• Students in either field who wish to pursue independent research may take HPS1500H Research Paper (0.5 FCE), in which they carry out a self-initiated research project under the direction of a faculty advisor.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 15 sessions part-time

Time Limit

3 years full-time; 6 years part-time

HPST: History and Philosophy of Science and Technology PhD

Doctor of Philosophy

Program Description

Admission to the PhD program is highly selective and competitive. Acceptance is based on a combination of grades, references, academic and professional accomplishments, areas of interest, and a sample of written work. The IHPST website contains detailed instructions for completing admission applications. Applications must be accompanied by transcripts, a statement of interest, letters of reference, a curriculum vitae, and a writing sample. The application deadline is January 15 of every year.

Applicants must be admitted via one of the following routes: 1) following completion of a master’s degree in History and
Philosophy of Science and Technology or 2) direct entry following completion of an appropriate bachelor’s degree.

With the approval of the Director of Graduate Studies, some applicants may be admitted to a flexible-time PhD option. This option will benefit mature students who remain active in their professional careers during the PhD, such as physicians, engineers, educators, and IT professionals. The option will enable them to engage in supervised research in the history and/or philosophy of their profession.

Applicants who wish to take one or more of the courses offered by IHPST as non-degree students should apply for admission as Special Students. The application procedures are the same as for those of the MA program, but the deadline for applications is May 1.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPST's additional admission requirements stated below.
- A University of Toronto master’s degree in History and Philosophy of Science and Technology or its equivalent from a recognized university with an average grade of at least an A– in the applicant’s program and with no individual grade less than B+. While the majority of accepted students exceed this standard, the very broad scope of the field and the variety of fruitful approaches to it also imply that many different backgrounds are appropriate. Accordingly, grades are only one criterion used to judge applicants.
- Applications must be accompanied by a 300- to 500-word statement of interest indicating the applicant’s areas of interest in history and/or philosophy of science and technology at the graduate level. A writing sample of no more than 3,000 (not to exceed 20 pages) words is required.
- Applicants whose primary language is not English and who are not graduates of a university whose language of instruction is English must submit results of the Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) with the following minimum scores:
  - Paper-based TOEFL: 580 and 5 on the TWE or
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.
- Students in the philosophy field must demonstrate proficiency in introductory logic, a reading knowledge of French, or a reading knowledge of German; logic and language instruction courses are not counted in the FCEs required for the degree
- **The philosophy field (Philosophy of Science).** Students in the philosophy field must demonstrate proficiency in introductory logic, a reading knowledge of French, or a reading knowledge of German; logic and language instruction courses are not counted in the FCEs required for the degree.
  - Submit a proposal for an advanced research paper (required for HPS1100Y*) by end of Year 1 for students who enter with a master’s degree.
  - Students are responsible for ensuring that they have an appropriate supervisor. All supervision arrangements are reviewed and approved by the Director of Graduate Studies who assists in the search for a supervisor, if necessary. Proper supervision is a prerequisite for continuation in the program.
  - Pass a qualifying examination in areas related to the field of expected research. Examination is conducted by the student's specialist committee, normally three faculty members.
  - Submit a thesis proposal approved by the student's thesis supervisory committee and the Director of Graduate Studies.

Program Length

4 years

Time Limit

6 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPST's additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university, with an average grade of at least a B+ in the
Program Requirements

- Students admitted on the basis of a bachelor's degree (direct-entry) must:
  - Complete 6.0 full-course equivalents (FCEs) in total; of these, students must complete all of the MA program requirements including language proficiency, normally in Year 1.
  - Complete all required courses by the end of Year 2. The exception is HPS1100Y*, which should be completed at the end of Year 3.
  - Make course choices consistent with a commitment to either:
    - One of the three history fields (History of Mathematics and Physical Sciences; History of Medicine and Life Sciences; History of Technology). Students in the history fields must demonstrate reading knowledge of French or German; language instruction courses are not counted in the FCEs required for the degree or
    - The philosophy field (Philosophy of Science). Students in the philosophy field must demonstrate proficiency in introductory logic, a reading knowledge of French, or a reading knowledge of German; logic and language instruction courses are not counted in the FCEs required for the degree.
- Arrange the balance of their curriculum in consultation with the Director of Graduate Studies and faculty instructors.
- Submit a proposal for an advanced research paper (required for HPS1100Y*), by end of Year 2.
- Students are responsible for ensuring that they have an appropriate supervisor. All supervision arrangements are reviewed and approved by the Director of Graduate Studies who assists in the search for a supervisor, if necessary. Proper supervision is a prerequisite for continuation in the program.
- Maintain a cumulative average of at least A– with no individual grade less than B+. In addition, all students should receive at least an A– on the HPS1100Y* Advanced Research Paper. Students falling below these standards may be recommended for termination from the program.
- Demonstrate other competencies crucial to conducting research in the student's thesis area, as determined by the supervisory committee in consultation with the student and the Director of Graduate Studies. This may include, for example, competence in another language; mathematics; and a physical, life, or social science.
- Pass a qualifying examination in areas related to the field of expected research. Examination is conducted by the student's specialist committee, normally three faculty members.
- Submit a thesis proposal approved by the student’s thesis supervisory committee and the Director of Graduate Studies.

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option.
- Students will be admitted on the basis of a master’s degree in History and Philosophy of Science and Technology: admission based on a bachelor's degree is not available.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy IHPST’s additional admission requirements stated below.
- A University of Toronto master’s degree in History and Philosophy of Science and Technology or its equivalent from a recognized university with an average grade of at least an A– in the applicant's program and with no individual grade less than B+. While the majority of accepted students exceed this standard, the very broad scope of the field and the variety of fruitful approaches to it also imply that many different backgrounds are appropriate. Accordingly, grades are only one criterion used to judge applicants.
- Applications must be accompanied by a 300- to 500-word statement of interest indicating the applicant's areas of interest in history and/or philosophy of science and technology at the graduate level. A writing sample is required.
- Applicants whose primary language is not English and who are not graduates of a university whose language of instruction is English must submit results of the Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) with the following minimum scores:
  - Paper-based TOEFL: 580 and 5 on the TWE
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.

Applications must be accompanied by a 300- to 500-word statement of interest indicating the applicant's areas of interest in history and/or philosophy of science and technology at the graduate level. A writing sample is required.
Program Requirements

- Program requirements for the flexible-time option are identical to those for the full-time PhD program, except that the program of study will relate to the student's work and vice versa.
- Students in the flexible-time option are required to register full-time for the first four years of the program. Thereafter, they may register part-time.
- Transfers between the full-time PhD program and the flexible-time PhD option are not permitted.
- Students in the flexible-time option must satisfy the SGS General Regulations and Degree Regulations in the SGS Calendar, including good academic standing, supervision, and candidacy regulations.
- The student will develop a thesis proposal, which must be approved by the student's thesis supervisory committee and the Director of Graduate Studies.
- Students admitted on the basis of a master's degree must:
  - Complete 3.0 full-course equivalents (FCEs): a student whose MA degree does not exhibit sufficient breadth is required to take additional courses.
  - Make course choices consistent with a commitment to either:
    - One of the three history fields (History of Mathematics and Physical Sciences; History of Medicine and Life Sciences; History of Technology). Students in the history fields must demonstrate reading knowledge of French or German; language instruction courses are not counted in the FCEs required for the degree or
    - The philosophy field (Philosophy of Science). Students in the philosophy field must demonstrate proficiency in introductory logic, a reading knowledge of French, or a reading knowledge of German; logic and language instruction courses are not counted in the FCEs required for the degree.
- Arrange the balance of their curriculum in consultation with the Director of Graduate Studies and faculty instructors.
- Submit a proposal for an advanced research paper (required for HPS1100Y+), by the end of Year 1.
- Students are responsible for ensuring that they have an appropriate supervisor. All supervision arrangements are reviewed and approved by the Director of Graduate Studies who assists in the search for a supervisor, if necessary. Proper supervision is a prerequisite for continuation in the program.
- Maintain a cumulative average of at least A– with no individual grade less than B+. In addition, all students should receive at least an A– on the HPS1100Y+ Advanced Research Paper. Students falling below these standards may be recommended for termination from the program.
- Demonstrate other competencies crucial to conducting research in the student's thesis area, as determined by the supervisory committee in consultation with the student and the Director of Graduate Studies. This may include, for example, competence in another language; mathematics; and a physical, life, or social science.
- Pass a qualifying examination in areas related to the field of expected research. Examination is conducted by the student's specialist committee, normally three faculty members.
- Submit a thesis proposal approved by the student's thesis supervisory committee and the Director of Graduate Studies.

Program Length

- 6 years

Time Limit

- 8 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

HPST: History and Philosophy of Science and Technology MA, PhD Courses

Not all courses are offered every year. Consult IHPST regarding course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPS1000H</td>
<td>Introduction to the History and Philosophy of Science and Technology (pro-seminar: required for all students in their first session)</td>
</tr>
<tr>
<td>HPS1001H</td>
<td>Individual Reading and Research in History and Philosophy of Science and Technology</td>
</tr>
<tr>
<td>HPS1002H</td>
<td>Individual Reading and Research in History and Philosophy of Science and Technology</td>
</tr>
<tr>
<td>HPS1003H</td>
<td>Individual Reading and Research in History and Philosophy of Science and Technology</td>
</tr>
<tr>
<td>HPS1005Y</td>
<td>Individual Reading and Research in History and/or Philosophy of Science and Technology</td>
</tr>
<tr>
<td>HPS1100Y+</td>
<td>Advanced Research Paper (required for all students)</td>
</tr>
<tr>
<td>HPS1500H</td>
<td>Research Paper</td>
</tr>
<tr>
<td>HPS2000H</td>
<td>History of Mathematics</td>
</tr>
<tr>
<td>HPS2001H</td>
<td>History of Physics</td>
</tr>
<tr>
<td>HPS2003H</td>
<td>History of Biology</td>
</tr>
<tr>
<td>HPS2004H</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>HPS2006H</td>
<td>History of Technology</td>
</tr>
<tr>
<td>HPS2008H</td>
<td>History of Psychology</td>
</tr>
<tr>
<td>HPS2009H</td>
<td>History and Philosophy of the Social Sciences</td>
</tr>
<tr>
<td>HPS2010H</td>
<td>The Sciences of Human Nature</td>
</tr>
<tr>
<td>HPS3000H</td>
<td>Philosophy of Science</td>
</tr>
<tr>
<td>HPS3001H</td>
<td>The Philosophy of Biology</td>
</tr>
<tr>
<td>HPS3002H</td>
<td>The History and Philosophy of Science</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>HPS3003H</td>
<td>Social Studies of Medicine</td>
</tr>
<tr>
<td>HPS3004H</td>
<td>Philosophy of Medicine</td>
</tr>
<tr>
<td>HPS3006H</td>
<td>Philosophy of Probability</td>
</tr>
<tr>
<td>HPS3007H</td>
<td>Philosophy of Economics</td>
</tr>
<tr>
<td>HPS3008H</td>
<td>Philosophy of Science and Religion</td>
</tr>
<tr>
<td>HPS3009H</td>
<td>Slavery, Medicine, and Science in Historical Perspective</td>
</tr>
<tr>
<td>HPS3010H</td>
<td>Social Epistemology</td>
</tr>
<tr>
<td>HPS4001H</td>
<td>The Scientific Revolution: Galileo to Newton</td>
</tr>
<tr>
<td>HPS4007H</td>
<td>Body, Medicine, and Society in Early Modern Europe</td>
</tr>
<tr>
<td>HPS4011H</td>
<td>Cognitive Technologies: Philosophical Issues and Debates</td>
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<tr>
<td>HPS4017H</td>
<td>The Rise of Eugenics: A Comparative History</td>
</tr>
<tr>
<td>HPS4020H</td>
<td>Postcolonialism and the Global Turn in Science and Technology Studies</td>
</tr>
<tr>
<td>HPS4021H</td>
<td>Feminist Approaches to Science and Technology Studies</td>
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<tr>
<td>HPS4040H</td>
<td>Computing and Information from Babbage to AI</td>
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<tr>
<td>HPS4106H</td>
<td>Environment and STS</td>
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<tr>
<td>HPS4300H</td>
<td>The Historian's Craft: Sources, Methods, and Approaches</td>
</tr>
<tr>
<td>HPS4512H</td>
<td>Thought Experiments</td>
</tr>
<tr>
<td>HPS4601H</td>
<td>Topics in Philosophy of Science</td>
</tr>
</tbody>
</table>

+ Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**Outside Courses of Possible Interest**

Check with individual departments for course availability during the academic year.

**Book History and Print Culture**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BKS1001H</td>
<td>Introduction to Book History</td>
</tr>
<tr>
<td>BKS1002H</td>
<td>Book History in Practice</td>
</tr>
<tr>
<td>BKS2000H</td>
<td>Advanced Seminar in Book History and Print Culture</td>
</tr>
</tbody>
</table>
Immunology

Immunology: Introduction

Faculty Affiliation

Medicine

Degree Programs

Immunology

MSc

- Fields:
  - Applied Immunology;
  - Fundamental Immunology

PhD

- Field:
  - Fundamental Immunology

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Developmental Biology
  - Immunology, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Immunology, MSc, PhD
- Sexual Diversity Studies
  - Immunology, PhD
- Women’s Health
  - Immunology, MSc, PhD

Overview

The Department of Immunology provides a common forum for investigators in many areas of the University of Toronto and an interdisciplinary research experience in immunology. Members and students in the department are located at the Medical Sciences Building; the Ontario Cancer Institute; and the research institutes of Mount Sinai Hospital, Toronto General Hospital, Toronto Western Hospital, the Hospital for Sick Children, and Sunnybrook Hospital.

Contact and Address

Web: www.immunology.utoronto.ca
Email: graduate.immunology@utoronto.ca
Telephone: (416) 978-6382

Department of Immunology
University of Toronto
Medical Sciences Building
Room 7205, 1 King’s College Circle
Toronto, Ontario M5S 1A8
Canada

Immunology: Graduate Faculty

Full Members

Anderson, Michele - BS, PhD
Berger, Stuart - BSc, MSc, PhD
Berinstein, Neil - MD
Brooks, David - BS, PhD
Butler, Marcus - BA, MD
Coburn, Bryan - BSc, DrMed
Croitoru, Ken - MDCM
Cybulsky, Myron - MD
Danska, Jayne - AB, PhD
de Perrot, Marc - MSc, MD
Ehrhardt, Goetz - MS, PhD
Eiwegger, Thomas - MD
Epelman, Slava - MD, DrMed
Fish, Eleanor - BSc, MPH, PhD
Gehring, Adam - BA, PhD
Gommerman, Jennifer - BSc, PhD
Gorczynski, Reginald - BSc, BA, MA, MD, PhD
Grunebaum, Eyal - MD
Guidos, Cynthia - BSc, PhD
Iscove, Norman - MD, PhD
Juvet, Stephen - DrMed, PhD
Mak, Tak - BSc, MSc, PhD
Mallevaey, Thierry - MSc, PhD (Associate Chair, Graduate Studies)
Martin, Alberto - BSc, MSc, PhD
McGaha, Tracy Lynn - BSc, MS, PhD
Ohashi, Pam - BSc, PhD
Paige, Christopher - BSc, PhD
Philpott, Dana - BS, PhD
Piguet, Vincent - BM, DrMed, PhD
Radvanyi, Laszlo - BSc, MSc, PhD
Ratcliffe, Michael - PhD
Robbins, Clinton Shane - BS, PhD
Roffman, Chaim - MD
Rottapel, Robert - BA, MD
Siminovitch, Katherine - MD
Tsui, Florence - BSc, MSc, PhD
Wall, Donna - MD
Watts, Tania - BSc, PhD
Winer, Daniel - BS, MD
Wither, Joan - MD, PhD
Woo, Minna - MD
Zhang, Li - MSc, MD, PhD
Zúñiga-Pflücker, Juan Carlos - BSc, PhD (Chair and Graduate Chair)
Members Emeriti

Julius, Michael - BSc, PhD
Letarte, Michelle - BSc, PhD
Levy, Gary - BSc, MD
Painter, Robert - BSc, PhD
Poussier, Philippe - MD
Shulman, Marc - AB, PhD
Williams, David - BSc, MSc, PhD
Wu, Gillian - BSc, MSc, PhD

Associate Members

Jongstra-Bilen, Jenny - BSc, MSc, PhD
Julien, Jean-Philippe - PhD
Khan, Omar F. - PhD
Lee, Nana Hyung-Ran - PhD
Martinu, Tereza - MD
Mortha, Arthur - MSc, PhD
Rojas, Olga Lucia - PhD
Saibil, Samuel - MD, PhD
Singh, Jastaran - BSc, PhD

Immunology: Immunology MSc Field: Applied Immunology

Master of Science

Program Description

The MSc program is offered in two fields:

- The non-thesis Applied Immunology field provides advanced training in designing, implementing, and evaluating immunological techniques that measure immune responses.
- The thesis-based Fundamental Immunology field provides advanced training in an area of specialization, with a particular emphasis on the acquisition of experience in the strategies and experimental methods of modern, original, scientific research.

Students in the Applied Immunology field (including the advanced-standing option) are not eligible to participate in collaborative specializations.

Field: Applied Immunology

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Immunology's additional admission requirements stated below.

- An appropriate BSc, or its equivalent, normally with at least a B+ average and a strong background in molecular and cellular biology. Applicants lacking adequate training in immunology or biological or natural sciences may be advised to do extra coursework necessary for their research.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Applicants educated outside Canada are required to provide Graduate Record Examination (GRE) (general) scores with their application.
- Before starting the program, applicants may be required to complete SCS 3128 (at the discretion of the Department of Immunology).
- Please note that the Applied Immunology field is unable to accept international students at this time.

Program Requirements

- Students must complete any courses conditional of acceptance.
- Coursework. Students must successfully complete a total of 7.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - 2.0 FCEs: IMM1450Y, IMM1550Y
    - 1.0 FCE selected from IMM1428H, IMM1429H, IMM1430H, IMM1431H
    - 0.5 FCE: IMM1436H
  - Year 2:
    - 1.0 FCE: IMM1050H0, IMM1075H0
    - 1.0 FCE: IMM1650Y
    - 0.5 FCE: IMM1651H
    - 1.0 FCE selected from the elective course list below.
- Students are required to participate full-time until the program requirements of research and coursework have been completed.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMM1050H0</td>
<td>Easton Seminar Series (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1075H0</td>
<td>Special Topics in Immunology (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1428H</td>
<td>Molecular Immunology</td>
</tr>
<tr>
<td>IMM1429H</td>
<td>Developmental Immunology</td>
</tr>
<tr>
<td>IMM1430H</td>
<td>Clinical Immunology</td>
</tr>
<tr>
<td>IMM1431H</td>
<td>Immunotherapy</td>
</tr>
<tr>
<td>IMM1436H</td>
<td>Techniques in Immunology</td>
</tr>
<tr>
<td>IMM1450Y</td>
<td>Major Research Project in Immunology (I)</td>
</tr>
<tr>
<td>IMM1550Y</td>
<td>Major Research Project in Immunology (II)</td>
</tr>
<tr>
<td>IMM1650Y</td>
<td>Major Research Project in Immunology (III)</td>
</tr>
<tr>
<td>IMM1651H</td>
<td>Applied Research in Immunology (Credit/No Credit)</td>
</tr>
</tbody>
</table>
Elective Courses

Not all courses are offered every year. Please consult the department for details. With the permission of the Associate Chair, Graduate Studies, students may also take graduate courses which are not found in the list below, in a subject relevant to their research project.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC1850H</td>
<td>Creating Life Science Products</td>
</tr>
<tr>
<td>BTC1860H</td>
<td>Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)</td>
</tr>
<tr>
<td>CSB1018H</td>
<td>Advanced Microscopy and Imaging</td>
</tr>
<tr>
<td>CSB1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>IMM1435H</td>
<td>Practical Immunology</td>
</tr>
<tr>
<td>JBZ1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>JDB1025H</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>JTB2010H</td>
<td>Proteomics and Functional Genomics</td>
</tr>
<tr>
<td>JTB2020H</td>
<td>Applied Bioinformatics</td>
</tr>
<tr>
<td>MSC1090H</td>
<td>Introduction to Computational BioStatistics with R</td>
</tr>
<tr>
<td>MSC7000Y</td>
<td>Regenerative Medicine</td>
</tr>
<tr>
<td>PSL1014H</td>
<td>Advanced Topics: The Gastrointestinal Epithelium</td>
</tr>
</tbody>
</table>

Program Requirements

- **Coursework.** Successful completion of 5.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE: IMM1550Y, completed in the first Summer session
  - 1.0 FCE: IMM1650Y
  - 2.0 FCEs: IMM1050H\(^5\), IMM1075H\(^5\), IMM1436H, IMM1651H
  - 1.0 FCE selected from the elective course list below.

Required Courses

<table>
<thead>
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<tbody>
<tr>
<td>IMM1050H(^5)</td>
<td>Easton Seminar Series (I) (Credit/No Credit)</td>
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<tr>
<td>IMM1075H(^5)</td>
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</tr>
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<td>Techniques in Immunology</td>
</tr>
<tr>
<td>IMM1550Y</td>
<td>Major Research Project in Immunology (II)</td>
</tr>
<tr>
<td>IMM1650Y</td>
<td>Major Research Project in Immunology (III)</td>
</tr>
<tr>
<td>IMM1651H</td>
<td>Applied Research in Immunology (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Field: Applied Immunology (Advanced-Standing Option)

Minimum Admission Requirements

- Applicants with an Immunology specialist or major undergraduate degree from the University of Toronto, may be eligible for advanced standing.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Immunology's additional admission requirements stated below.
  - An appropriate BSc from the University of Toronto (including those with an Immunology specialist or major undergraduate degree), normally with at least a B+ average and a strong background in molecular and cellular biology. Applicants lacking adequate training in immunology or biological or natural sciences may be advised to do extra coursework necessary for their research.
  - Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Applicants educated outside Canada are required to provide Graduate Record Examination (GRE) (general) scores with their application.
  - Applicants must have completed the following University of Toronto undergraduate course or its equivalent: IMM450H1.
  - Applicants must have completed the following University of Toronto undergraduate courses: two of IMM428H1, IMM429H1, IMM430H1, IMM431H1.
  - Applicants must already have a graduate research supervisor who is a graduate faculty member in the Department of Immunology.
  - Please note that the Applied Immunology field (advanced-standing option) is unable to accept international students at this time.

Elective Courses

Not all courses are offered every year. Please consult the department for details. With the permission of the Associate Chair, Graduate Studies, students may also take graduate
courses which are not found in the list below, in a subject relevant to their research project.

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<td>CSB1018H</td>
<td>Advanced Microscopy and Imaging</td>
</tr>
<tr>
<td>CSB1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>IMM1435H</td>
<td>Practical Immunology</td>
</tr>
<tr>
<td>JBZ1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>JDB1025H</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>JTB2010H</td>
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</tr>
<tr>
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</tr>
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<td>MSC1090H</td>
<td>Introduction to Computational BioStatistics with R</td>
</tr>
<tr>
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<td>Regenerative Medicine</td>
</tr>
<tr>
<td>PSL1014H</td>
<td>Advanced Topics: The Gastrointestinal Epithelium</td>
</tr>
</tbody>
</table>

Field: Fundamental Immunology

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Immunology's additional admission requirements stated below.
- An appropriate BSc, or its equivalent, normally with at least a B+ average and a strong background in molecular and cellular biology. Applicants lacking adequate training in biological or natural sciences may be advised to do extra coursework necessary for their research.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Applicants educated outside Canada are required to provide Graduate Record Examination (GRE) (general) scores with their application.

Program Requirements

- **Coursework.** Successful completion of 3.0 full-course equivalents (FCEs):
  - IMM1000Y Recent Advances in Immunology (1.0 FCE)
  - IMM1200H+ Scientific Skills for Immunologists (0.5 FCE)
  - IMM1025H Student Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1050H Easton Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1075H Special Topics in Immunology (I) (Credit/No Credit; 0.5 FCE).
- A satisfactory thesis embodying the student’s research.
- Upon of completion of the thesis, pass an oral examination.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>IMM1000Y</td>
<td>Recent Advances in Immunology</td>
</tr>
<tr>
<td>IMM1025H</td>
<td>Student Seminar Series (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1050H</td>
<td>Easton Seminar Series (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1075H</td>
<td>Special Topics in Immunology (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1200H</td>
<td>Scientific Skills for Immunologists</td>
</tr>
</tbody>
</table>

\(^{(0)}\) Course that may continue over a program. Credit is given when course is completed.
**Elective Courses**

<table>
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<td>IMM1436H</td>
<td>Techniques in Immunology</td>
</tr>
<tr>
<td>IMM2200H+</td>
<td>Graduate Professional Development (GPD)</td>
</tr>
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<td>JBZ1472H</td>
<td>Computational Genomics and Bioinformatics</td>
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</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

0 Course that may continue over a program. The course is graded when completed.

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**Immunology: Immunology PhD**

**Doctor of Philosophy**

**Program Description**

The PhD degree is an advanced research degree intended to reflect a level of training consistent with the ability of the candidate to function as an independent research scientist.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree; 2) transfer from the MSc in Immunology program, Fundamental Immunology field; or 3) direct entry following completion of a BSc degree.

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**Field: Fundamental Immunology**

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Immunology’s additional admission requirements stated below.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Applicants educated outside Canada are required to provide Graduate Record Examination (GRE) (general) scores with their application.
- Applicants who have completed an MSc degree must have at least a B+ average in that degree.
- Applicants may be accepted for direct entry with a BSc degree, with at least an A– average in the final two years.

**Program Requirements**

- **Coursework.** Students must successfully complete a total of **4.5 full-course equivalents (FCEs)** as follows:
  - IMM1000Y Recent Advances in Immunology (1.0 FCE)
  - IMM1200H+ Scientific Skills for Immunologists (0.5 FCE); in the event the student has taken this course to complete the MSc in Immunology, Fundamental Immunology field, a substitute course will be taken with approval of the Graduate Coordinator
  - IMM2000H PhD Proposal in Immunology (0.5 FCE)
  - IMM2025H0 Student Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2050H0 Easton Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2075H0 Special Topics in Immunology (II) (Credit/No Credit; 0.5 FCE)
  - 1.0 elective FCE at the graduate level from either Immunology or outside the department as relevant to their thesis topic (examples are provided in the elective course list).
- Students must complete a **qualifying exam** (DEX5555Y, Credit/No Credit; 0.0 FCE) within 24 months of starting the PhD program, Fundamental Immunology field.
- Candidates must submit a **thesis** and defend it at a **Doctoral Final Oral Examination** conducted by the School of Graduate Studies.
- Students are required to participate full-time until the program requirements of research and coursework have been completed.

**Required Courses**

<table>
<thead>
<tr>
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<tr>
<td>IMM2000H</td>
<td>PhD Proposal in Immunology</td>
</tr>
<tr>
<td>IMM2025H0</td>
<td>Student Seminar Series (II) (Credit/No Credit)</td>
</tr>
</tbody>
</table>
**PhD Program (Transfer)**

**Transfer Requirements**

- Transfer applicants must be enrolled in the MSc Immunology program, Fundamental Immunology field.
- Applicants must pass a reclassification (transfer) exam (DEX5555Y, Credit/No Credit; 0.0 FCE) within 24 months of initial registration in the MSc Immunology program, Fundamental Immunology field.
- Successful completion of IMM1200H* and IMM1000Y with at least a B+ overall average, prior to taking the reclassification exam (DEX5555Y).
- Completion of, or concurrent registration in, IMM1025H0, IMM1050H0, and IMM1075H0.

**Program Requirements**

- **Coursework.** Students must successfully complete a total of 6.0 full-course equivalents (FCEs) as follows:
  - IMM1000Y Recent Advances in Immunology (1.0 FCE)
  - IMM1200H* Scientific Skills for Immunologists (0.5 FCE)
  - IMM1025H0 Student Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1050H0 Easton Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1075H0 Special Topics in Immunology I (Credit/No Credit; 0.5 FCE)
  - IMM2000H PhD Proposal in Immunology (0.5 FCE)
  - IMM2025H0 Student Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2050H0 Easton Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2075H0 Special Topics in Immunology (II) (Credit/No Credit; 0.5 FCE)
  - 1.0 elective FCE at the graduate level from either Immunology or outside the department as relevant to their thesis topic (examples are provided in the elective course list).
- Students must successfully complete the reclassification transfer exam (DEX5555Y, Credit/No Credit; 0.0 FCE) within 24 months of starting the MSc Immunology program, Fundamental Immunology field.
- Candidates must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.
- Students are required to participate full-time until the program requirements of research and coursework have been completed.

**Required Courses**

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<td>Easton Seminar Series (I) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM1075H0</td>
<td>Special Topics in Immunology (I) (Credit/No Credit)</td>
</tr>
</tbody>
</table>

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**Elective Courses**

Not all courses are offered every year. Please consult the department for details. With the permission of the Associate Chair, Graduate Studies, students may also take graduate courses which are not found in the list below, in a subject relevant to their research project.

- **BTC1850H** Creating Life Science Products
- **BTC1860H** Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
- **CSB1018H** Advanced Microscopy and Imaging
- **CSB1472H** Computational Genomics and Bioinformatics
- **IMM1436H** Techniques in Immunology
- **IMM2400H** Translational Immunology
- **JBZ1472H** Computational Genomics and Bioinformatics
- **JDB1025H** Developmental Biology
- **JTB2010H** Proteomics and Functional Genomics
- **JTB2020H** Applied Bioinformatics
- **MSC1090H** Introduction to Computational BioStatistics with R
- **MSC7000Y** Regenerative Medicine
- **PSL1014H** Advanced Topics: The Gastrointestinal Epithelium

**Program Length**

4 years

**Time Limit**

6 years
**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Direct entry is available for highly qualified BSc graduates who completed the undergraduate Immunology specialist program or an appropriate undergraduate program in the life sciences from a recognized university, with a minimum A– average in the final two years and relevant research experience.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Immunology’s additional admission requirements stated below.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Applicants educated outside Canada are required to provide Graduate Record Examination (GRE) (general) scores with their application.
- Applicants are selected by the departmental admissions committee on the basis of academic and research excellence. Admission to the program is finalized when a graduate faculty member agrees to supervise the student’s research and guarantees a full stipend for the student.

**Program Requirements**

- **Coursework.** Students must successfully complete a total of 6.0 full-course equivalents (FCEs) as follows:
  - IMM1000Y Recent Advances in Immunology (1.0 FCE)
  - IMM1200H+ Scientific Skills for Immunologists (0.5 FCE)
  - IMM1025H0 Student Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1050H0 Easton Seminar Series (I) (Credit/No Credit; 0.5 FCE)
  - IMM1075H0 Special Topics in Immunology I (Credit/No Credit; 0.5 FCE)
  - IMM2025H0 Student Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2000H PhD Proposal in Immunology (0.5 FCE)
  - IMM2050H0 Easton Seminar Series (II) (Credit/No Credit; 0.5 FCE)
  - IMM2075H0 Special Topics in Immunology (II) (Credit/No Credit; 0.5 FCE)
  - 1.0 elective FCE at the graduate level from either Immunology or outside the department as relevant to their thesis topic (examples are provided in the elective course list).
- Students must complete a qualifying exam (DEX5555Y, Credit/No Credit; 0.0 FCE) within 24 months of starting the PhD program, Fundamental Immunology field.
- Candidates must submit a thesis and defend it at a Doctoral Final Oral Examination conducted by the School of Graduate Studies.
- Students are required to participate full-time until the program requirements of research and coursework have been completed.
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</tr>
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<td>IMM2000H</td>
<td>PhD Proposal in Immunology</td>
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<td>Student Seminar Series (II) (Credit/No Credit)</td>
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<td>Easton Seminar Series (II) (Credit/No Credit)</td>
</tr>
<tr>
<td>IMM2075H0</td>
<td>Special Topics in Immunology (II) (Credit/No Credit)</td>
</tr>
<tr>
<td>DEX5555Y</td>
<td>Departmental Examination (Credit/No Credit; prerequisite: IMM1000Y)</td>
</tr>
</tbody>
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* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

0 Course that may continue over a program. The course is graded or credit is given when completed.

**Elective Courses**

Not all courses are offered every year. Please consult the department for details. With the permission of the Associate Chair, Graduate Studies, students may also take graduate courses which are not found in the list below, in a subject relevant to their research project.

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<td>Computational Genomics and Bioinformatics</td>
</tr>
<tr>
<td>IMM1436H</td>
<td>Techniques in Immunology</td>
</tr>
<tr>
<td>IMM2200H</td>
<td>Graduate Professional Development (GPD) 2.0</td>
</tr>
<tr>
<td>JBZ1472H</td>
<td>Computational Genomics and Bioinformatics</td>
</tr>
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</tr>
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</table>

**Program Length**

5 years

**Time Limit**

7 years
Industrial Relations and Human Resources

IRHR: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Industrial Relations and Human Resources

MIRHR

PhD

- Field:
  - Canadian Industrial Relations and Human Resources

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Ethnic, Immigration and Pluralism Studies
  - Industrial Relations and Human Resources, MIRHR, PhD

- Workplace Learning and Social Change
  - Industrial Relations and Human Resources, MIRHR, PhD

Overview

In addition to faculty directly appointed to the Centre for Industrial Relations and Human Resources (CIRHR), the centre brings together professors from many different disciplines and departments at the University of Toronto to teach and conduct research on all aspects of the workplace and employment relationships. The CIRHR faculty reflect the depth, breadth, and diversity of our university.

Contact and Address

Web: www.cirhr.utoronto.ca
Email: cir.info@utoronto.ca
Telephone: (416) 978-0551
Fax: (416) 978-5696

Centre for Industrial Relations and Human Resources
University of Toronto
121 St. George Street
Toronto, Ontario M5S 2E8
Canada

Industrial Relations and Human Resources: Graduate Faculty

Full Members

Campolieti, Michele - BSc, MA, PhD
Dhuey, Elizabeth Ann - BA, MSc, PhD
Gomez, Rafael - BA, MA, MIR, PhD
Hyatt, Douglas - BA, MA, PhD
Krashinsky, Harry - MA, PhD
Krashinsky, Michael - SB, MPH, AM, PhD
Langille, Brian A - LLB, BCL, BA
Latham, Gary - BA, MS, PhD
Macklem, Patrick - BA, LLB, LLM, William C. Graham Chair in International Law and Development
Pohler, Dionne - BComm, PhD
Reitz, Jeffrey G. - PhD
Rotundo, Maria - BA, MA, PhD
Saks, Alan - BA, MSc, PhD

Members Emeriti

Gunderson, Morley - BA, MA, PhD
Reid, Frank - BA, MSc, PhD (Coordinator of Graduate Studies)
Verma, Anil - BTech, MBA, PhD

Associate Members

Campero Molina, Santiago - MBA, PhD
Distelhorst, Gregory Michael - BA, PhD
Eads, Alicia - DPhil
Rittich, Kenny - BAMus, LLB, SJD
Sawchuk, Peter - BSc, BEd, PhD
Scanlan, Padraic - PhD, PhD
Seward, Bradley - PhD, PhD

IRHR: Industrial Relations and Human Resources MIRHR

Master of Industrial Relations and Human Resources

Program Description

The Master of Industrial Relations and Human Resources (MIRHR) degree program benefits students who are interested in advanced academic study leading to career opportunities in human resources management, labour-management relations, collective bargaining and dispute resolution, organization development and change, and labour market and social policy.

The MIRHR is a professional degree program designed to train students in the latest innovations and best practices within industrial relations and human resources management. The program uses an interdisciplinary approach to provide specialized study of the employment relationship.
The MIRHR offers two program options:

- The two-year MIRHR option allows qualified students to complete the degree program in two years (16 non-consecutive months) of full-time study.
- The advanced-standing MIRHR option enables qualified students to complete the MIRHR in one year (12 consecutive months) of full-time study.

Both options may be taken on a part-time basis.

MIRHR Program (Two-Year)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the CIRHR additional admission requirements stated below.
- Applicants to the two-year MIRHR program require an appropriate bachelor's degree from a recognized university. A minimum grade average of B+ in each of the final two years of the degree is required.
- All applicants are encouraged to submit results from the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT). Although these tests are not required and there is no minimum score requirement, this information is helpful to the admissions committee. Test results more than five years old are normally not considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must write the Test of English as a Foreign Language (TOEFL). The following minimum scores are acceptable:
  - paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections.
- Since space in the program is limited, all applicants who meet the minimum admission requirements cannot be guaranteed admission. The CIRHR admissions committee reserves the right to select qualified applicants to the program. All admission decisions are final.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must write the Test of English as a Foreign Language (TOEFL). The following minimum scores are acceptable:
  - paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections.
- Since space in the program is limited, all applicants who meet the minimum admission requirements cannot be guaranteed admission. The CIRHR admissions committee reserves the right to select qualified applicants to the program. All admission decisions are final.

Program Requirements

- Each student's program of courses must be approved by the Coordinator of Graduate Studies. If chosen courses appear to overlap to a large degree, approval may be denied.
- Students must have a mid-B average overall to be recommended for the degree.
- Failure in any course (that is, a grade of less than B–) will require a review of the student's program by the department.
- A student who fails two or more courses is no longer in good academic standing and a recommendation for termination will be made to the School of Graduate Studies.

Year 1: Foundation Courses

- Year 1 is spent acquiring a foundation in industrial relations and human resources and includes courses in economics, human resources management, law, quantitative methods, and organizational behaviour. Courses marked (PR) require prerequisites; further information may be obtained from CIRHR.
- Students must take 4.0 full-course equivalents (FCEs), of which 3.5 are required courses, as follows:
  - IRE1002H Applied Statistics in Industrial Relations
  - IRE1010H Economic Foundations of Industrial Relations and Human Resources
  - IRE1126H Economics of Labour and Human Resources (PR)
  - IRE1362H Organizational Behaviour
  - IRE1609H Strategic Human Resources Management (exclusion: RSM2609H Aligning People and Strategy)
  - IRE1610H Industrial Relations
  - plus one of the following law courses:
    - IRE1270H Law of Labour Relations
    - IRE1338H Law in the Workplace.
- 0.5 FCE is an elective course that is chosen from the list below to fill the requisite 4.0 FCEs in Year 1 of the program.
- Students admitted into the two-year MIRHR program may apply to take IRE4000H, a non-credit course designed for students to gain summer employment in a position that will provide them with work experience relevant to their field of study.
- Students in the MIRHR program are required to achieve a mid-B average in Year 1 of the program (or in the first 4.0 FCEs) in order to continue or to pass into Year 2.

Year 2: Core Courses

- Students must take 4.0 FCEs to complete Year 2. This includes core courses in Industrial Relations and Human Resources (1.5 FCEs):
  - IRE2001H Foundations and Current Issues in Industrial Relations and Human Resources
  - IRE2002H Research Methods for Industrial Relations and Human Resources (PR)
  - plus one of the following courses:
    - IRE2003H Research Project in Industrial Relations and Human Resources (PR)
    - IRE2004H Data Analytics and Metrics in Industrial Relations and Human Resources (PR).
- 2.5 FCEs are elective courses that are chosen from the list below to fill the requisite 4.0 FCEs in Year 2 of the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time; 6 years part-time
MIRHR Program (Advanced-Standing Option: 12-Month)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Industrial Relations and Human Resources additional admission requirements stated below.
- Applicants to the 12-month MIRHR advanced-standing option require an appropriate bachelor's degree from a recognized university and significant academic training (normally 3.0 full-course equivalents [FCEs] at the senior undergraduate level), employment relations, human resources, industrial relations, labour studies, or labour economics. If the admissions committee determines that an applicant does not have sufficient academic training to qualify for advanced standing, the student will be considered for the two-year MIRHR degree. A minimum grade average of B+ in each of the final two years of the degree is required.
- All applicants are encouraged to submit results from the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT). Although these tests are not required and there is no minimum score requirement, this information is helpful to the admissions committee. Test results more than five years old are normally not considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must write the Test of English as a Foreign Language (TOEFL). The following minimum scores are acceptable:
  - paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections.
- Since space in the program is limited, all applicants who meet the minimum admission requirements cannot be guaranteed admission. The CIRHR admissions committee reserves the right to select qualified applicants to the program. All admission decisions are final.

Program Requirements

- Each student's program of courses must be approved by the Coordinator of Graduate Studies. If chosen courses appear to overlap to a large degree, approval may be denied.
- Students must have a mid-B average overall to be recommended for the degree.
- Failure in any course (that is, a grade of less than B–) will require a review of the student's program by the department.
- A student who fails two or more courses is no longer in good academic standing and a recommendation for termination will be made to the School of Graduate Studies.
- Students admitted into the 12-month MIRHR advanced-standing option will have completed many of the foundation courses in industrial relations and human resources.
- Students will take both foundation and core courses simultaneously in the three sessions of study (September to August). During this time, students will also take elective courses to increase their breadth of knowledge or to focus on their areas of interest.
- Students must take 5.5 full-course equivalents (FCEs), of which 3.0 are required courses, as follows:
  - IRE1010H Economic Foundations of Industrial Relations and Human Resources
  - IRE1126H Economics of Labour and Human Resources (PR)
  - IRE2001H Foundations and Current Issues in Industrial Relations and Human Resources
  - IRE2002H Research Methods for Industrial Relations and Human Resources (PR)
  - plus one of the following courses:
    - IRE2003H Research Project in Industrial Relations and Human Resources (PR)
    - IRE2004H Data Analytics and Metrics in Industrial Relations and Human Resources (PR)
  - plus one of the following law courses:
    - IRE1270H Law of Labour Relations
    - IRE1338H Law in the Workplace.
- 2.5 FCEs are elective courses that are chosen from the list below to fill the requisite 5.5 FCEs in the program.
- Students in the MIRHR advanced-standing option are required to achieve a mid-B average in the first 2.5 FCEs of the program in order to continue.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time; 6 years part-time

IRHR: Industrial Relations and Human Resources PhD

Doctor of Philosophy

Program Description

The Doctor of Philosophy (PhD) degree program benefits students who are interested in advanced academic study leading to career opportunities in human resources management; labour-management relations; collective bargaining and dispute resolution; organization development and change; and labour market and social policy. The PhD program is a research-oriented program of study designed to provide students with a thorough knowledge of the field and strong research skills. Offered only on a full-time basis, students normally fulfill a two-year residency requirement that enables their full participation in the activities associated with the program.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master's degree or 2) direct entry following completion of a bachelor's degree.
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Industrial Relations and Human Resources' additional admission requirements stated below.
- Applicants require a Master of Industrial Relations and Human Resources (MIRHR) degree from the University of Toronto, or its equivalent.
- Students with a master's degree in another related social science discipline may be considered for admission to the PhD if they have exceptional academic standing and have demonstrated quantitative skills and research ability.
- At least a B+ standing, or equivalent, is required in the previous master's program. Academic performance in courses relevant to the applicant's area of interest, as well as performance in statistics and research methods courses are taken into consideration by the admissions committee.
- Applicants are required to submit a copy of their results from the Graduate Record Examination (GRE). Although there is no minimum score requirement, performance on the GRE will be taken into consideration by the admissions committee. Test results more than five years old are normally not considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must write the Test of English as a Foreign Language (TOEFL). The following minimum scores are acceptable:
  - paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 and 22/30 on both the writing and speaking sections.
- Applicants may be required to appear for a personal interview and/or submit copies of recent academic work.

Program Requirements

Normally, requirements in Years 1 and 2 consist of a core course in Industrial Relations and Human Resources, elective courses, and courses in research methods and statistics.

- Students must take the equivalent of 4.5 full-course equivalents (FCEs) as follows:
  - The core requirement in Industrial Relations and Human Resources is met by completing:
    - IRE3004H Special Topics in Employment and Industrial Relations.
  - The research and statistics requirements are met by completing:
    - IRE3002Y Research Seminar I
    - IRE3003H Research Seminar II (PR)
    - RSM3062H Methods and Research in Organizational Behaviour
    - 1.0 FCE in statistics, chosen, with the approval of the PhD Coordinator, from selected offerings in other departments and Faculties.
  - In cases where a student's prior academic background may have covered any of the courses listed above, substitutions may be permitted with the approval of the PhD Coordinator.

Optional courses require 1.0 FCE is chosen from the elective courses set out below or from selected offerings in other departments and Faculties.

- A comprehensive examination is normally written by January 31 of Year 2. It is designed to encourage students to broaden their understanding of industrial relations and human resources, to demonstrate analytical and methodological abilities, and to address current policy issues. The examination is four to five hours in length and graded as Pass/Fail. It is normally set by four faculty members and students must answer one of two questions submitted by each of them.
- A student who fails the first attempt at the exam will be permitted one more attempt. Failure of the second attempt will result in a recommendation for program termination.
- Intensive work on the dissertation will also begin in Year 2 of the PhD program. The thesis topic and name of supervisor must be submitted no later than March 31 of Year 2.
- Students who are in Years 3 and 4 must enrol in the following courses:
  - IRE3005H Workshop in Industrial Relations I (Credit/No Credit)
  - IRE3006H Workshop in Industrial Relations II (Credit/No Credit).
- Students will have achieved candidacy upon successful completion of the program requirements above at the end of Year 3 of study.
- Proficiency in French and/or other languages will be required when the student's supervisor deems it necessary for dissertation research or when CIRHR deems it necessary for the student's area of research.
- Thesis and a Doctoral Final Oral Examination on the thesis.
- The program is available only on a full-time basis and normally has a two-year residency requirement, during which time the student is required to participate fully in the department's activities associated with the program.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Industrial Relations and Human Resources' additional admission requirements stated below.
- Students who hold a bachelor's degree in industrial relations or human resources may be considered for admission to the PhD if they have exceptional academic standing and have demonstrated quantitative skills and
research ability. Students will be required to complete additional courses.

- Academic performance in courses relevant to the applicant's area of interest, as well as performance in statistics and research methods courses are taken into consideration by the admissions committee.
- Applicants are required to submit a copy of their results from the Graduate Record Examination (GRE). Although there is no minimum score requirement, performance on the GRE will be taken into consideration by the admissions committee. Test results more than five years old are normally not considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must write the Test of English as a Foreign Language (TOEFL). The following minimum scores are acceptable:
  - paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 and 22/30 on both the writing and speaking sections.
- Applicants may be required to appear for a personal interview and/or submit copies of recent academic work.

Program Requirements

- Normally, requirements in Years 1 and 2 consist of a core course in Industrial Relations and Human Resources, elective courses, and courses in research methods and statistics.
- Students must take up to the equivalent of 8.5 full-course equivalents (FCEs) as follows:
  - The core requirement in Industrial Relations and Human Resources is met by completing:
    - IRE3004H Special Topics in Employment and Industrial Relations.
  - The research and statistics requirements are met by completing:
    - IRE3002Y Research Seminar I
    - IRE3003H Research Seminar II (PR)
    - RSM3062H Methods and Research in Organizational Behaviour
  - 1.0 FCE in statistics, chosen, with the approval of the PhD Coordinator, from selected offerings in other departments and Faculties.
  - In cases where a student's prior academic background may have covered any of the courses listed above, substitutions may be permitted with the approval of the PhD Coordinator.
  - 4.0 FCEs chosen in consultation with the PhD Coordinator.
  - 1.0 FCE is chosen from the elective courses set out below or from selected offerings in other departments and Faculties.
- A comprehensive examination is normally written by January 31 of Year 2 in the program. It is designed to encourage students to broaden their understanding of industrial relations and human resources, to demonstrate analytical and methodological abilities, and to address current policy issues. The examination is four to five hours in length and graded as Pass/Fail. It is normally set by four faculty members and students must answer one of two questions submitted by each of them.
- A student who fails the first attempt at the exam will be permitted one more attempt. Failure of the second attempt will result in a recommendation for program termination.

- Intensive work on the dissertation will also begin in Year 2 of the PhD program. The thesis topic and name of supervisor must be submitted no later than March 31 of Year 2.
- Students who are in Years 3 and 4 must enrol in the following courses:
  - IRE3005H Workshop in Industrial Relations I (Credit/No Credit)
  - IRE3006H Workshop in Industrial Relations II (Credit/No Credit).
- Students will have achieved candidacy upon successful completion of the program requirements above at the end of Year 4.
- Proficiency in French and/or other languages will be required when the student's supervisor deems it necessary for dissertation research or when CIRHR deems it necessary for the student's area of research.
- Thesis and a Doctoral Final Oral Examination on the thesis.
- The program is available only on a full-time basis and normally has a two-year residency requirement, during which time the student is required to participate fully in the department's activities associated with the program.

Program Length

5 years

Time Limit

7 years

IRHR: Industrial Relations and Human Resources MiRHR, PhD Courses

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRE1002H</td>
<td>Applied Statistics in Industrial Relations</td>
</tr>
<tr>
<td>IRE1010H</td>
<td>Economic Foundations of Industrial Relations and Human Resources (PR)</td>
</tr>
<tr>
<td>IRE1126H</td>
<td>Economics of Labour and Human Resources</td>
</tr>
<tr>
<td></td>
<td>(PR)</td>
</tr>
<tr>
<td>IRE1270H</td>
<td>Law of Labour Relations</td>
</tr>
<tr>
<td>IRE1338H</td>
<td>Law in the Workplace</td>
</tr>
<tr>
<td>IRE1362H</td>
<td>Organizational Behaviour</td>
</tr>
<tr>
<td>IRE1609H</td>
<td>Strategic Human Resources Management</td>
</tr>
<tr>
<td>IRE1610H</td>
<td>Industrial Relations</td>
</tr>
<tr>
<td>IRE1700H</td>
<td>HR Consulting Models, Practices, and Applications (PR)</td>
</tr>
<tr>
<td>IRE2001H</td>
<td>Foundations and Current Issues in Industrial Relations and Human Resources</td>
</tr>
</tbody>
</table>
Elective Courses

The Centre for Industrial Relations and Human Resources (CIRHR) offers key elective courses in both industrial relations and human resources. With the permission of the Graduate Coordinator, students may take courses in other departments and Faculties. Since graduate units give preference to their own students, CIRHR students can enrol in these elective courses only when space is available. Students must meet the standards and requirements of the other departments and Faculties in those courses taken outside CIRHR.

Not all courses are offered every year. The availability of elective courses may be subject to change due to such factors as faculty research leaves and departmental resources. Some courses may be available only in the day or in the evening.

Please consult the CIRHR timetable which lists available courses in each session. The notation (PR) following a course indicates the course has a prerequisite, and additional information may be obtained from CIRHR.

Further details concerning specific courses and brief course descriptions are available on the CIRHR website.

Industrial Relations and Human Resources

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>IRE1260H</td>
<td>Seminar on Labour Arbitration (PR)</td>
</tr>
<tr>
<td>IRE1270H</td>
<td>Law of Labour Relations</td>
</tr>
<tr>
<td>IRE1338H</td>
<td>Law in the Workplace</td>
</tr>
<tr>
<td>IRE1600H</td>
<td>International Developments in Labour and Human Resource Policy (PR)</td>
</tr>
<tr>
<td>IRE1611H</td>
<td>Sociology of Work and Organizations</td>
</tr>
<tr>
<td>IRE1615H</td>
<td>Labour and Globalization (PR)</td>
</tr>
<tr>
<td>IRE1620H</td>
<td>Labour Relations Problems in Historical Perspective</td>
</tr>
<tr>
<td>IRE1625H</td>
<td>Contemporary Issues in Public Sector Labour-Management Relations (PR)</td>
</tr>
<tr>
<td>IRE1630H</td>
<td>Negotiation Skills, Theory, and Practice (PR)</td>
</tr>
<tr>
<td>IRE1635H</td>
<td>Collective Bargaining (PR)</td>
</tr>
<tr>
<td>IRE1640H</td>
<td>Contemporary Trade Unionism: Issues, Challenges, Strategy (PR)</td>
</tr>
<tr>
<td>IRE1650H</td>
<td>Managing Workplace Conflict (PR)</td>
</tr>
<tr>
<td>IRE1655H</td>
<td>Health and Safety</td>
</tr>
<tr>
<td>IRE1715H</td>
<td>Special Topics in Industrial Relations and Human Resources</td>
</tr>
<tr>
<td>IRE1720H</td>
<td>Managing Organizational Change (PR)</td>
</tr>
<tr>
<td>IRE1725H</td>
<td>Cross Cultural Differences in Organizational Contexts (PR)</td>
</tr>
<tr>
<td>IRE1730H</td>
<td>Contemporary Challenges Facing Today's Organizations (PR)</td>
</tr>
<tr>
<td>IRE2021H</td>
<td>Business Strategy for IR/HR</td>
</tr>
<tr>
<td>IRE3615H</td>
<td>Performance Management Systems (PR)</td>
</tr>
<tr>
<td>IRE3635H</td>
<td>Compensation (PR)</td>
</tr>
<tr>
<td>IRE3640H</td>
<td>Recruitment and Selection (PR)</td>
</tr>
<tr>
<td>IRE3645H</td>
<td>Training and Development (PR)</td>
</tr>
<tr>
<td>IRE3650H</td>
<td>Human Resource Planning and Strategy (PR)</td>
</tr>
<tr>
<td>IRE3655H</td>
<td>Leadership (PR)</td>
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</tbody>
</table>

Adult Education and Counselling Psychology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1268H</td>
<td>Career Counselling and Development: Transition in Adulthood</td>
</tr>
<tr>
<td>LHA1101H</td>
<td>Program Planning in Adult Education</td>
</tr>
<tr>
<td>LHA1148H</td>
<td>Introduction to Workplace, Organizational, and Economic Democracy</td>
</tr>
</tbody>
</table>

Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO3800H</td>
<td>Labour Economics I</td>
</tr>
<tr>
<td>ECO3801H</td>
<td>Labour Economics II</td>
</tr>
</tbody>
</table>

Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM2129H</td>
<td>Forecasting Models and Econometric Methods</td>
</tr>
<tr>
<td>RSM2612H</td>
<td>Managing Talent for Global Operations</td>
</tr>
<tr>
<td>RSM2615H</td>
<td>Special Topics in Organizational Behaviour and Human Resource Management</td>
</tr>
</tbody>
</table>
### Political Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL2307H</td>
<td>The Political Economy of Technology: from the Auto-Industrial to the Information Age</td>
</tr>
</tbody>
</table>

### Public Health Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5904H</td>
<td>Perspectives in Occupational and Environmental Health — Legal and Social Context</td>
</tr>
</tbody>
</table>

### Sociology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC6003H</td>
<td>Immigration II</td>
</tr>
<tr>
<td>SOC6012H</td>
<td>Work, Stratification, and Markets I</td>
</tr>
</tbody>
</table>

### Other Elective Courses

With the approval of the Graduate Coordinator, students may register in the following credit/no-credit course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRE4000H</td>
<td>Work Term in IR/HRM (Credit/No Credit)</td>
</tr>
</tbody>
</table>

### Reading Courses

In certain circumstances, and with the approval of the Graduate Coordinator, students may be allowed to take a reading or research course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRE1090H</td>
<td>A reading course or individual research in an approved field</td>
</tr>
<tr>
<td>IRE2090H</td>
<td>A reading course or individual research in an approved field</td>
</tr>
</tbody>
</table>
Information

Information: Introduction

Faculty Affiliation

Information

Degree Programs

Information

MI

• Concentrations:
  o Archives and Records Management (ARM);
  o Critical Information Policy Studies (CIPS);
  o Culture and Technology (C&T);
  o Human Centred Data Science (HCDS);
  o Information Systems and Design (ISD);
  o Knowledge Management and Information Management (KMIM);
  o Library and Information Science (LIS);
  o User Experience Design (UXD)

PhD

• Concentrations:
  o Archives and Records Management;
  o Critical Information Policy Studies;
  o Cultural Heritage;
  o Information Systems and Design;
  o Knowledge Management and Information Management;
  o Library and Information Science;
  o Media, Technology, and Culture;
  o Philosophy of Information

Museum Studies

MMSt

Combined Degree Programs

• STG, Law, JD / MI
• STG, MI / MMSt

Diploma Program

Information Studies

GDiplSt, a post-master's diploma

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Aging, Palliative and Supportive Care Across the Life Course
  o Information, MI, PhD
• Book History and Print Culture
  o Information, MI, PhD
  o Museum Studies, MMSt
• Environmental Studies
  o Information, MI, PhD
• Food Studies
  o Information, MI
  o Museum Studies, MMSt
• Jewish Studies
  o Information, PhD
  o Museum Studies, MMSt
• Knowledge Media Design
  o Information, MI, PhD
  o Museum Studies, MMSt
• Sexual Diversity Studies
  o Information, MI, PhD
  o Museum Studies, MMSt
• Women and Gender Studies
  o Information, MI, PhD

Overview

The Faculty of Information at the University of Toronto is one of the world’s most important information and knowledge management schools. Information is studied and tough questions are asked for the benefit of society and the students. Located in the heart of Canada’s most diverse and dynamic city, the programs are led by leading researchers and faculty across multiple disciplines and result in exceptional research and career opportunities. The Faculty of Information is the centre for information professions and leaders of research that matters.

People. Information. Technology. They intersect at the Faculty of Information, a launch pad for futures as highly skilled practitioners or researchers. Today’s technologies have transformed the way we connect with, shape, and use information. Similar changes have been taking place in the field of museums and cultural heritage.

Contact and Address

Web: ischool.utoronto.ca
General email: inquire.ischool@utoronto.ca
Admissions email: admissions.ischool@utoronto.ca
Telephone: (416) 978-3234
Fax: (416) 978-5762

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University of Toronto
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Canada
Information: Graduate Faculty

Full Members

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Andritsos, Periklis - BSc, MSc, PhD
Battershill, Claire - PhD
Becker, Christoph - BSc, MSc, DSc
Boucher, Marie-Pier - BSc, MSc, PhD
Burchell, Kenzie - BA, MSA, PhD
Caidi, Nadia - PhD
Caraway, Brett - BA, MA, PhD
Chandra, Priyank - PhD
Chen, Julie Yujie - BA, MA, PhD
Choo, Chun Wei - BA, MSc, PhD
Cohen, Nicole - BA, MA, PhD
Coleman, Beth Malaka - BA, PhD
Dahya, Negin - BA, MEd, PhD
Dallas, Constantinos - BA, MPH, PhD, PhD
Dilevko, Juris - MLIS, MA, PhD, PhD
Duff, Wendy - BA, BA, MLS, PhD (Dean)
Foscarini, Fiorella - PhD
Galey, Alan - PhD
Grimes, Sara - PhD
Hartel, Jenna - PhD
Howarth, Lynne - BA, MLS, PhD
Keilty, Patrick - BA, MLIS, PhD
Krmapotich, Cara - PhD
Kuzminyk, Anastasia - PhD
Luka, Mary Elizabeth - BA, BAA, PhD
Lyons, Kelly - BSc, MSc, PhD
MacNeil, Heather - PhD (Associate Dean, Academic)
McEwen, Rhonda - PhD
Mihalache, Irina - BA, MA, PhD
Niebog, David - PhD
Packer, Jeremy - BA, MA, PhD
Ratto, Matt - PhD
Rault, Jasmine - BA, MA, PhD
Ross, Seamus - BA, MA, DPhil
Ryan, Dan - PhD
Shachak, Aviv - DPhil
Shade, Leslie - BA, MLIS, PhD
Sharma, Sarah - BA, MA, PhD
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Stanbridge, Alan - BSc, AM, DA
Stevenson, Siobhan - PhD
Tang, Tony - PhD
Wensley, Anthony - MA, MA, MBA, PhD
Xue, Jia - BCL, MA, PhD
Yu, Eric - BSc, MMath, PhD

Members Emeriti

Clement, Andrew - BSc, MSc, PhD
Craig, Barbara - AM, PhD
Fleming, E. Patricia - BA, BLS, MLS
Phillips, David - PhD
Williamson, Nancy - BA, BLS, MLS

Associate Members

Allison-Cassin, Stacy - PhD
Dionisio, Max Vincent - PhD

Information: Information MI

Master of Information

Program Description

The MI program allows students to explore the breadth of information and to focus on one or more areas of study. Students may choose one of two pathways to completion:

- **Concentration pathway:** students choose one or two of eight concentrations and may complete:
  - Concentration(s) only,
  - Concentration(s) plus a thesis, or
  - Concentration(s) plus a co-op (CCO)

- **General program pathway:** students do not choose a formal concentration and may complete:
  - Coursework only,
  - Coursework plus a thesis, or
  - Coursework plus a co-op

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Application deadlines are available on the Faculty of Information website. Applicants must also satisfy the Faculty's additional admission requirements stated below. Meeting the minimum requirements does not guarantee admission.

- An appropriate bachelor's degree with at least a B average (3.0 GPA) from a university recognized by the University of Toronto.

- The bachelor's degree must normally contain at least 75% academic credits — that is, courses that are not professional, practical, technical, or vocational. Courses such as studio art, drama or music performance, theology, education, or undergraduate courses in library science are not normally considered to be sufficiently academic in content for admission purposes.

- Applicants who meet current admission requirements and who hold a BLS degree from the University of Toronto, or its equivalent from an approved university, may be admitted to the MI program with advanced standing. Such students may be required to take additional courses if certain requisite instruction is lacking.

- Applicants who have satisfactory standing in an undergraduate program and who have successfully completed information studies graduate courses in programs equivalent to the University of Toronto MI program may also apply for admission with advanced standing. Each application will be evaluated individually. At least 4.0 full-course equivalents (FCEs) towards the MI degree must be taken at the University of Toronto.
All incoming graduate students must have a good command of English. All applicants educated outside Canada whose primary language is not English must demonstrate proficiency in the English language. This requirement is a condition of admission and must be met before an offer of admission is made. The English language requirement may be satisfied using one of the following tests:

- Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL exam: 600 with 5.5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 107/120 with 24/30 on the speaking section and 27/30 on the writing section.
- International English Language Testing System (IELTS): a minimum required score of 7.5 overall with 7.5 on the writing section and 7.0 on the speaking section.
- Certificate of Proficiency in English (COPE): a minimum required score of 95 overall with 27 on the listening component, 27 on the reading component, and 27 on the writing component.
- English Language Program, U of T School of Continuing Studies with an overall score of A in Academic English Level 60.

Concentration-Plus-Co-operative Option (CCO)

To be considered for the CCO, Year 1 full-time MI program students must apply during the first (Fall) session of Year 1. For more information, visit the Faculty of Information website. Acceptance is limited and not guaranteed. Inquiries about the CCO may be emailed to ischool.coop@utoronto.ca.

Program Requirements

- The minimum requirement is completion of 8.0 full-course equivalents (FCEs), regardless of pathway or option therein.
- All students must successfully complete all degree requirements as outlined for either the concentration pathway or for the general program pathway.

Concentration Pathway

- The Faculty of Information offers eight concentrations leading to the MI degree:
  - Archives and Records Management (ARM)
  - Critical Information Policy Studies (CIPS)
  - Culture and Technology (C&T)
  - Human Centred Data Science (HCDS)
  - Information Systems and Design (ISD)
  - Knowledge Management and Information Management (KMIM)
  - Library and Information Science (LIS)
  - User Experience Design (UXD)
- Each concentration requires a total of 8.0 FCEs.

Concentration-Only Option

- Two quarter-weight core courses: INF1005H and INF1006H (0.5 FCE total).
- Four or five required half courses depending on the concentration (2.0 or 2.5 FCEs total, depending on the concentration).
- Plus 10 or 11 additional elective half courses (5.0 or 5.5 FCEs total, depending on the concentration).

Concentration-Plus-Thesis Option

The thesis option allows students to gain experience in developing and executing a research project from beginning to end. Students gain familiarity with the research process and hone their research skills. The thesis option is designed for students who have a clearly defined topic, can find a supervisor, and can meet tight deadlines in order to graduate within the usual time frame envisioned for the degree. Faculty approval is required to enter the thesis option; visit the Faculty of Information website for details. For information about completing a thesis in the General Pathway, please see the General Pathway program requirements below.

- Two quarter-weight core courses: INF1005H and INF1006H (0.5 FCE total).
- Five required half courses (2.5 FCEs total, specific to each concentration). The exception is Library and Information Science, which has four required half courses (2.0 FCEs).
- 0.5 FCE research methods course appropriate to the student's program of study, with a final grade of at least A–.
- 0.5 FCE reading course with the student's intended supervisor, with a final grade of at least A–.
- A thesis (2.0 FCEs total).
- Four additional elective half courses (2.0 FCEs total, specific to each concentration). The exception is Library and Information Science, which requires five additional elective half courses (2.5 FCEs total).

Concentration-Plus-Co-op Option

- Two quarter-weight core courses: INF1005H and INF1006H (0.5 FCE total).
- Five required half courses (2.5 FCEs total, specific to each concentration). The exception is Library and Information Science, which requires four half courses (2.0 FCEs total).
- INF3900H The Emerging Professional (0.5 FCE).
- The two 12-week co-op placement courses: INF3902H and INF3903H (1.0 FCE total).
- Seven additional elective half courses (3.5 FCEs total, specific to each concentration). The exception is Library and Information Science, which requires eight additional elective half courses (4.0 FCEs total)

Concentration: Archives and Records Management (ARM)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1003H, INF1330H, INF1331H or INF2186H, INF2175H, and INF2184H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.
Concentration: Critical Information Policy Studies (CIPS)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1001H, INF2181H, INF2240H, INF2242H, and INF2243H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

Concentration: Culture and Technology (C&T)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1501H, INF1502H, INF2241H, either INF2320H or INF2331H, and INF2243H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

Concentration: Human Centred Data Science (HCDS)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1340H, INF1344H, INF2178H, INF2190H, and INF2210H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

Concentration: Information Systems and Design (ISD)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1339H, INF1341H, INF1342H, INF1343H, and INF2177H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

Concentration: Knowledge Management and Information Management (KMIM)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1003H, INF1230H, INF1235H, INF1236H, and INF1240H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

Concentration: Library and Information Science (LIS)

- 0.5 core FCE (INF1005H and 1006H).
- 2.0 required FCEs (INF1321H, INF1322H, INF1323H, and INF1324H).
- 5.5 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 4.0 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.5 elective FCEs.

Concentration: User Experience Design (UXD)

- 0.5 core FCE (INF1005H and 1006H).
- 2.5 required FCEs (INF1602H, INF2169H, INF2170H, INF2191H, and INF2192H).
- 5.0 elective FCEs or co-op (1.0 FCE), INF3900H (0.5 FCE), and 3.5 elective FCEs or thesis (2.0 FCEs), research methods course (0.5 FCE), and reading course (0.5 FCE) plus 2.0 elective FCEs.

General Program Pathway (No Concentrations)

Coursework Option

Students choosing the coursework option must have their program of study approved by the Program Director.

- Two quarter-weight core courses: INF1005H and INF1006H (0.5 FCE total).
- Three required half courses: INF1001H, INF1003H, and INF1240H (1.5 FCEs total).
- 6.0 elective FCEs.

Thesis Option

Faculty approval is required to enter the thesis option. Visit the Faculty of Information website for details.

- Two quarter-weight core courses: INF1005H and INF1006H (0.5 FCE total).
- Three required half courses: INF1001H, INF1003H, and INF1240H (1.5 FCE total).
- 0.5 required FCE consisting of one research methods half course appropriate to the student's program of study, with a final grade of at least A−. INF1240H can be used to meet this requirement.
- 0.5 required FCE reading course with the student’s intended supervisor, with a final grade of at least A−.
- A thesis (2.0 FCEs).
- Six elective half courses (3.0 FCEs) or seven elective half courses (3.5 FCEs) if INF1240H has been completed and counted toward the research methods half-course requirement
  - These courses may include up to 2.0 FCEs taken outside the MI program.

Program Length

4 sessions (2 years) full-time (typical registration sequence: F/W/F/W);
Information: Information Studies GDipISt

Graduate Diploma of Advanced Study in Information Studies

Program Description

The Diploma of Advanced Study in Information Studies is a post-master's diploma. It is designed:

- for information professionals who want to pursue further studies, but do not wish to take a PhD degree
- for practitioners who wish to advance their professional standing, develop a specialization, or redirect their career
- to build on a person’s knowledge, experience, previous education, and special interests
- to be tailored to the individual’s needs and interests.

Diploma of Advanced Study in Information Studies credits cannot be transferred to the PhD program, and there is no thesis option.

The diploma may be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Information’s additional admission requirements stated below.
- Applicants must have a Master of Information or equivalent degree. Visit the Faculty of Information website for details.
- The graduate diploma program will be tailored to the individual’s needs and interests with courses selected in consultation with the Graduate Coordinator.
- All incoming graduate students must have a good command of English. Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must show evidence of having taken one of the following tests. Scores must be from tests taken within the last two years.
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: 600 and 5.5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 107/120, with 24/30 on the speaking section and 27/30 on the writing section.
  - The International English Language Testing System (IELTS): a minimum required score of 7.5 overall with 7.5 on the writing section and 7.0 on the speaking section.
  - Certificate of Proficiency in English (COPE): a minimum required score of 95 overall with 41 on the writing component, 27 on the reading component, and 27 on the listening component.
  - English Language Program, U of T School of Continuing Studies with an overall score of A in Academic English Level 60.

Program Requirements

- Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - At least 3.0 FCEs (six half courses) must be chosen from courses offered in the MI degree program.
  - Only 0.5 FCE (one half course) may be a reading course.
  - Up to 1.0 FCE (two half courses) may be taken in other departments.

Program Length

2 sessions full-time; 4 sessions part-time

Time Limit

2 years full-time; 3 years part-time

Information: Information MI and Information Studies GDipISt Courses

Not all courses are offered every year. Consult the Faculty of Information website for the annual course offerings; course descriptions; and details of prerequisites, co-requisites, and permissions. Inquiries concerning the selection of courses to be offered in any given session should be directed to the Faculty of Information.

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<td>Digital Media Distribution</td>
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<tr>
<td>JIE1001H</td>
<td>Seminar in Identity, Privacy, and Security</td>
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**Information: Information PhD**

**Doctor of Philosophy**

**Program Description**

The PhD program in Information provides opportunities for advanced scholarly inquiry into theoretical aspects of information and in the empirical investigations of information in various contexts.

PhD students come from different backgrounds and with different areas of interest. Therefore, the curriculum both fosters a common conversation about the field of information and supports the development of individual (even idiosyncratic) research projects. The focus of the program is to enable the student to achieve competence in order to carry out the research and writing of an original thesis in information.
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Information’s additional admission requirements stated below.
- Average of at least A– in an appropriate master’s degree program, or equivalent. Equivalency is normally determined by the number of courses and/or credits taken. Applicants holding an MLS or other master’s degree earned in two or three sessions, or by completing 5.0 to 7.5 full-course equivalents (FCEs), will normally be required to take additional courses in the MI program.
- Admission is limited to graduates of high intellectual ability who have an interest in research. Evaluation of applicants is based on academic records, a statement of research interest, and three academic letters of reference. A personal interview may be requested.
- All incoming graduate students must have a good command of English. All applicants educated outside Canada whose primary language is not English must demonstrate proficiency in the English language. This requirement is a condition of admission and must be met before an offer of admission is made. The English language requirement may be satisfied using one of the following tests. Scores must be from tests taken within the last two years.
  - Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL exam: 600 with 5.5 on the Test of Written English (TWE)
    - Internet-based TOEFL exam: 107/120 with 24/30 on the speaking section and 27/30 on the writing section.
  - International English Language Testing System (IELTS): a minimum required score of 7.5 overall with 7.5 on the writing section and 7.0 on the speaking section.
  - Certificate of Proficiency in English (COPE): a minimum required score of 95 overall with 41 on the writing section.
  - English Language Program, U of T School of Continuing Studies with an overall score of A in Academic English Level 60.
- Admission procedures are described in the General Regulations section of this calendar.
- Doctoral students are admitted in September.
- Meeting the minimum requirements of the Faculty of Information and the School of Graduate Studies does not guarantee admission.

Program Requirements

To achieve candidacy, students must fulfill the following:

- Students in the Media, Technology, and Culture concentration must complete 4.0 full-course equivalents (FCEs) as follows:
  - INF3001H Research in Information: Foundations (0.5 FCE).

PhD Program (Flexible-Time Option)

Admissions have been administratively suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Information’s additional admission requirements stated below.
- Average of at least A– in an appropriate master’s degree program, or equivalent. Equivalency is normally determined by the number of courses and/or credits taken. Applicants holding an MLS or other master’s degree earned in two or three sessions, or by completing 5.0 to 7.5 full-course equivalents (FCEs), will normally be required to take additional courses in the MI program.
- Admission is limited to graduates of high intellectual ability who have an interest in research. Evaluation of applicants is based on academic records, a statement of research interest, and three academic letters of reference. A personal interview may be requested.
All incoming graduate students must have a good command of English. All applicants educated outside Canada whose primary language is not English must demonstrate proficiency in the English language. This requirement is a condition of admission and must be met before an offer of admission is made. The English language requirement may be satisfied using one of the following tests. Scores must be from tests taken within the last two years.

- **Test of English as a Foreign Language (TOEFL)** with the following minimum scores:
  - Paper-based TOEFL exam: 600 with 5.5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 107/120 with 24/30 on the speaking section and 27/30 on the writing section.

- **International English Language Testing System (IELTS)**: a minimum required score of 7.5 overall with 7.5 on the writing section and 7.0 on the speaking section.

- **Certificate of Proficiency in English (COPE)**: a minimum required score of 95 overall with 41 on the writing component, 27 on the reading component, and 27 on the listening component.

- **English Language Program, U of T School of Continuing Studies** with an overall score of A in Academic English Level 60.

Admission procedures are described in the General Regulations section of this calendar. Doctoral students are admitted in September. Meeting the minimum requirements of the Faculty of Information and the School of Graduate Studies does not guarantee admission.

### Program Requirements

To achieve candidacy, students must fulfill the following:

- **Complete 4.0 full-course equivalents (FCEs)** as follows:
  - INF3001H Research in Information: Foundations (0.5 FCE).
  - A methods course (0.5 FCE): INF3003H Research in Information: Frameworks and Design or a specific methods course to be determined in consultation with the student's research advisor.
  - INF3006Y Major Area Reading Course (1.0 FCE) or two additional electives to be determined in consultation with the research advisor (1.0 FCE).
  - 2.0 FCEs in elective courses.

- Other courses appropriate for the student's research may also be required.

- Pass a qualifying exam.

- Present and defend a thesis research proposal.

- Complete a thesis and pass a Doctoral Final Oral Examination.

- Ensure that they have adequate time on campus to attend classes and to fulfill the academic requirements for an advanced research degree. Students must spend at least two full-time sessions on campus.

### Program Length

- 6 years

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### Information: Information PhD Courses

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<td>INF3101H</td>
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### Information: Museum Studies MMSt

#### Master of Museum Studies

**Program Description**

The MMSt program prepares students for future involvement in museums and related cultural agencies. The program examines the theoretical body of knowledge of museology as a necessary context for professional practice. The Faculty of Information also offers a combined degree program whereby students may complete both a Master of Information and Master of Museum Studies.

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Application deadlines are available on the Master of Museum Studies web page. Applicants must also satisfy the Faculty's additional admission requirements stated below. Meeting the minimum requirements does not guarantee admission.

- An appropriate bachelor's degree with an overall grade of at least a B+ average (grade point average 3.3) from a recognized university.

- Applicants must satisfy the Museum Studies program that they are capable of independent research in museum studies at an advanced level. Demonstrated previous experience in museums or related cultural organizations will also be considered. Admission to this program is competitive.

### Program Length

- 6 years

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Time Limit

- 8 years

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### Information: Museum Studies MMSt

#### Master of Museum Studies

**Program Description**

The MMSt program prepares students for future involvement in museums and related cultural agencies. The program examines the theoretical body of knowledge of museology as a necessary context for professional practice. The Faculty of Information also offers a combined degree program whereby students may complete both a Master of Information and Master of Museum Studies.

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Application deadlines are available on the Master of Museum Studies web page. Applicants must also satisfy the Faculty's additional admission requirements stated below. Meeting the minimum requirements does not guarantee admission.

- An appropriate bachelor's degree with an overall grade of at least a B+ average (grade point average 3.3) from a recognized university.

- Applicants must satisfy the Museum Studies program that they are capable of independent research in museum studies at an advanced level. Demonstrated previous experience in museums or related cultural organizations will also be considered. Admission to this program is competitive.
All incoming graduate students must have a good command of English. All applicants educated outside Canada whose primary language is not English must demonstrate proficiency in the English language. This requirement is a condition of admission and must be met before an offer of admission is made. The English language requirement may be satisfied using one of the following tests:

- **Test of English as a Foreign Language (TOEFL)** with the following minimum scores:
  - paper-based TOEFL exam: 600 with 5.5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 107/120 with 24/30 on the speaking section and 27/30 on the writing section.
- **International English Language Testing System (IELTS):** a minimum required score of 7.5 overall with 7.5 on the writing section and 7.0 on the speaking section.
- **Certificate of Proficiency in English (COPE):** a minimum required score of 95 overall with 41 on the writing component, 27 on the reading component, and 27 on the listening component.
- **English Language Program, U of T School of Continuing Studies** with an overall score of A in Academic English Level 60.

### Program Requirements

#### Coursework Option

- Students must complete a minimum of 7.5 **full-course equivalents (FCEs)** including:
  - Five required half courses (2.5 FCEs).
  - MSL4000Y Exhibition Project (1.0 FCE).
  - Eight additional courses (4.0 FCEs), of which 2.0 FCEs must be internal (Museum Studies) elective courses.

#### Thesis Option

- The thesis option allows students to gain experience in developing and executing a research project from beginning to end. Students gain familiarity with the research process and hone their research skills. Faculty approval is required to enter the thesis option. The thesis option is designed for students who have a clearly defined topic, can find a supervisor, and can meet tight deadlines in order to graduate within the usual time frame envisioned for the degree.
  - Students must complete 7.5 **full-course equivalents (FCEs)** as follows:
    - Five required half courses (2.5 FCEs).
    - A research methods course (0.5 FCE) appropriate to their program of study with a final grade of at least A-.
    - A thesis (2.0 FCEs).
    - Five additional courses (2.5 FCEs), of which four graduate half courses may be taken outside the MMSt program.

#### Program Length

4 sessions (2 years) full-time (typical registration sequence: F/W/F/W)

### Time Limit

3 years full-time

### Information: Museum Studies MMSt Courses

Not all courses are offered every year. Please consult the Faculty of Information website for course availability. The minimum requirement for the MMSt degree is **7.5 full-course equivalents (FCEs)**.

#### MMSt Required Courses (3.5 FCEs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL1150H</td>
<td>Collection Management</td>
</tr>
<tr>
<td>MSL1230H</td>
<td>Ethics, Leadership, Management</td>
</tr>
<tr>
<td>MSL2331H</td>
<td>The Museum Exhibition: Histories, Practices, Genres</td>
</tr>
<tr>
<td>MSL2370H</td>
<td>Museums and Cultural Heritage: Context and Critical Issues</td>
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**either**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MSL2350H</td>
<td>Museum Planning and Management: Projects and Fundraising</td>
</tr>
<tr>
<td>INF2040H</td>
<td>Project Management</td>
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</table>

**either**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL4000Y</td>
<td>Exhibition Project</td>
</tr>
</tbody>
</table>

#### MMSt Elective Courses

##### Internal (Museum Studies) Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL1300H</td>
<td>Contemporary Theories of Art and Culture</td>
</tr>
<tr>
<td>MSL1350H</td>
<td>Museums and their Publics</td>
</tr>
<tr>
<td>MSL2000H</td>
<td>Curatorial Practice</td>
</tr>
<tr>
<td>MSL2050H</td>
<td>Curating Science</td>
</tr>
<tr>
<td>MSL2100H</td>
<td>Museum Environment</td>
</tr>
<tr>
<td>MSL2115H</td>
<td>Global Cultures and Museums</td>
</tr>
<tr>
<td>MSL2230H</td>
<td>Nature and Culture: Histories of Heritage Interpretation in North America</td>
</tr>
<tr>
<td>MSL2235H</td>
<td>Equity, Diversity, and Inclusion in the GLAM Sector</td>
</tr>
<tr>
<td>MSL2240H</td>
<td>The Photographic Record</td>
</tr>
<tr>
<td>MSL2255H</td>
<td>Social Digital Memory</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td>MSL2301H to MSL2310H</td>
<td>Special Topics in Museum Studies</td>
</tr>
<tr>
<td>MSL2325H</td>
<td>Museums and New Media Practice</td>
</tr>
<tr>
<td>MSL2330H</td>
<td>Interpretation and Meaning Making in Museums</td>
</tr>
<tr>
<td>MSL2332H</td>
<td>Public Programs and Education</td>
</tr>
<tr>
<td>MSL2340H</td>
<td>Issues in Cultural Policy and Contemporary Culture</td>
</tr>
<tr>
<td>MSL2360H</td>
<td>Museums and Indigenous Communities: Changing Relationships, Changing Practice</td>
</tr>
<tr>
<td>MSL2500H</td>
<td>Constructing and Curating Digital Heritage</td>
</tr>
<tr>
<td>MSL3000H</td>
<td>Internship (prerequisite: MSL3900H)</td>
</tr>
<tr>
<td>MSL3900H</td>
<td>The Emerging Museum Professional</td>
</tr>
<tr>
<td>MSL5050H</td>
<td>Special Studies</td>
</tr>
</tbody>
</table>

**External Elective Courses**

Courses relevant to the Museum Studies program and student interests are available on the [program web page](#).

**McLuhan Program in Culture and Technology**

The McLuhan Program in Culture and Technology does not offer a degree program. Students registered in a graduate program may take McLuhan program courses for credit with the permission of their home department.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T1006H</td>
<td>Media, Mind, and Society I</td>
</tr>
<tr>
<td>C&amp;T1008H</td>
<td>Media, Mind, and Society II</td>
</tr>
<tr>
<td>C&amp;T1009H</td>
<td>New Media and Policy</td>
</tr>
</tbody>
</table>

Students interested in pursuing studies in the impact of communication media on humans and their environment should consult the Director of the program for a list of courses available in cognate departments.
Italian Studies

Italian Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Italian Studies

MA

- Field:
  - Italian Literature

PhD

- Fields:
  - Middle Ages and Renaissance;
  - Seventeenth and Eighteenth Centuries;
  - Nineteenth and Twentieth Centuries

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - Italian Studies, MA, PhD
- Sexual Diversity Studies
  - Italian Studies, MA, PhD

Overview

Graduate students in the Department of Italian Studies come from several parts of the world, including Canada, the United States, and Europe. Faculty members are heavily engaged in teaching and research in their fields. Some of them are associated at the graduate level with the Centre for Comparative Literature, the Centre for Medieval Studies, the McLuhan program, Cinema Studies, and the Centre for Drama, Theatre and Performance Studies.

Contact and Address

Web: italianstudies.utoronto.ca
Email: Italian.grad@utoronto.ca
Telephone: (416) 978-6472

Department of Italian Studies
University of Toronto
Carr Hall, 2nd floor
100 St. Joseph Street
Toronto, Ontario M5S 1J4
Canada

Italian Studies: Graduate Faculty

Full Members

Bancheri, Salvatore - BA, MA, PhD
Brilli, Elisa - MA, PhD
Eisenbichler, Konrad - BA, MA, PhD
Guardiani, Francesco - MA, PhD
Lettieri, Michael - BA, MA, PhD
Pierino, Franco - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Robins, William - BA, MPH, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Somigli, Luca - PhD (Graduate Coordinator)
Terpstra, Nicholas - BA, MA, PhD

Associate Members

Casini, Simone - BA, MA, PhD
Morra, Eloisa - BA, MA, PhD
Polimeni, Giuseppe - BA, PhD
Zambenedetti, Alberto - MA, PhD
Zinelli, Fabio - MA, PhD

Italian Studies: Italian Studies MA

Master of Arts

Program Description

The MA program offers advanced education in Italian literature and provides training in research techniques.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Italian Studies' additional admission requirements stated below.
- Successful completion of 7.0 undergraduate full-course equivalents (FCEs) in Italian, including the following: 3.0 FCEs in Italian literature (students must have at least 0.5 FCE in each of three out of four different periods: medieval, Renaissance, seventeenth to eighteenth centuries, nineteenth to twenty-first centuries) and an appropriate upper-year 1.0 FCE in language.
- Minimum B+ standing in their University of Toronto 300- and 400-series courses (or in equivalent courses).
• Two letters of recommendation, preferably from instructors most familiar with the applicant's work.
• A personal statement of intent.
• The department will determine whether applicants need to complete prerequisite work in order to qualify for admission. Applicants will be advised accordingly.

Program Requirements

MA Without Thesis

• Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  o ITA1000H Methodologies for the Teaching and Study of Italian (0.5 FCE)
  o 3.5 graduate FCEs including a mandatory extra-departmental course (0.5 FCE) and up to two other extra-departmental courses (1.0 FCE) chosen in consultation with the Graduate Coordinator.
• A student's program of study must be approved by the department.

MA With Thesis Option

• Coursework. Students must successfully complete a total of 3.0 full-course equivalents (FCEs) as follows:
  o ITA1000H Methodologies for the Teaching and Study of Italian (0.5 FCE)
  o 2.5 graduate FCEs including a mandatory extra-departmental course (0.5 FCE) and up to two other extra-departmental courses (1.0 FCE) chosen in consultation with the Graduate Coordinator.
• MA thesis, subject to approval by the MA thesis supervisor.
• A student's program of study must be approved by the department.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 15 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Italian Studies: Italian Studies PhD

Doctor of Philosophy

Program Description

The PhD program prepares students for a career in teaching and scholarship. Graduates are expected to have acquired autonomy in conducting research and preparing scholarly publications. They are trained to teach undergraduate courses in all areas of Italian studies and to design and teach graduate courses in their fields of specialization.

The program is designed to provide a broad knowledge of the discipline, specialized knowledge of a single field, and training in all aspects of scholarly research in the discipline.

Applicants may enter the PhD program via one of two routes: (1) following completion of an appropriate MA degree or (2) direct entry after completing a bachelor's degree.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Italian Studies' additional admission requirements stated below.
• Successful completion of the University of Toronto MA or its equivalent with an overall average of at least A– in courses. Please note that an A– average does not guarantee admission to the program.
• Two letters of recommendation, preferably from instructors most familiar with the applicant's work.
• A personal statement of intent.
• A statement of research and proposed plan of study.
• A writing sample.
• A curriculum vitae (CV) in English.
• Notes:
  o Applicants with an Italian laurea magistrale/specialistica may apply for admission to the PhD program.
  o Applicants with a degree equivalent to a PhD (e.g., an Italian dottorato di ricerca, a PhD, a diploma di perfezionamento, etc.) cannot be accepted to the PhD program.

Program Requirements

• Coursework. Students normally complete a total of 4.0 full-course equivalents (FCEs) as follows:
  o 3.5 graduate FCEs including a mandatory extra-departmental course (0.5 FCE) and up to two other extra-departmental courses (1.0 FCE) chosen in consultation with the Graduate Coordinator.
  o ITA1000H Methodologies for the Teaching and Study of Italian (0.5 FCE);
• Language requirements. Students must show evidence of written and oral command of Italian; and, not later than the beginning of Year 3 of PhD registration, must have demonstrated a reading knowledge of Latin and one other language approved by the department.
• Program progress. All students must maintain a minimum A– average in order to remain in the program.
• Upon completion of all course requirements, and not later than Year 2 of the PhD program, students will complete the series of written and oral qualifying examinations.
Thesis and a Doctoral Final Oral Examination on the thesis. Permission to write the thesis in Italian (subject to final approval by the School of Graduate Studies) may be granted to students who first pass a supervised essay-type English examination to demonstrate proficiency in writing correct and idiomatic English prose.

Program Length
4 years

Time Limit
6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Italian Studies' additional admission requirements stated below.
- Exceptional students may be admitted directly to the PhD program from the BA with a minimum A– average. Such applicants will apply to the MA program, but indicate in a separate letter to the Graduate Coordinator that they wish to be considered for direct admission to the PhD program.
- Two letters of recommendation, preferably from instructors most familiar with the applicant's work.
- A personal statement of intent.
- A statement of research and proposed plan of study.
- A writing sample.
- A curriculum vitae (CV) in English.

Notes:
- Applicants with an Italian laurea magistrale/specialistica may apply for admission to the PhD program.
- Applicants with a degree equivalent to a PhD (e.g., an Italian dottorato di ricerca, a PhD, a diploma di perfezionamento, etc.) cannot be accepted to the PhD program.

Program Requirements

- **Coursework.** Students normally complete a total of 8.0 full-course equivalents (FCEs) as follows:
  - 7.5 graduate FCEs, including a mandatory extra-departmental course (0.5 FCE) and up to two other extra-departmental courses (1.0 FCE) chosen in consultation with the Graduate Coordinator.
  - ITA1000H Methodologies for the Teaching and Study of Italian (0.5 FCE);
- **Language requirements.** Students must show evidence of written and oral command of Italian; and, not later than the beginning of Year 3 of PhD registration, must have demonstrated a reading knowledge of Latin and one other language approved by the department.
- **Program progress.** All students must maintain a minimum A– average in order to remain in the program.

Upon completion of all course requirements, and not later than Year 2 of the PhD program, students will complete the series of written and oral qualifying examinations.

Thesis and a Doctoral Final Oral Examination on the thesis. Permission to write the thesis in Italian (subject to final approval by the School of Graduate Studies) may be granted to students who first pass a supervised essay-type English examination to demonstrate proficiency in writing correct and idiomatic English prose.

Program Length
5 years

Time Limit
7 years

Italian Studies: Italian Studies MA, PhD Courses

Not all courses are offered every year. Please consult the department regarding course availability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITA1000H</td>
<td>Methodologies for the Teaching and Study of Italian (Credit/No Credit)</td>
</tr>
<tr>
<td>ITA1001Y</td>
<td>Colloquia and Professional Development (Credit/No Credit)</td>
</tr>
<tr>
<td>ITA1025H</td>
<td>Old Italian</td>
</tr>
<tr>
<td>ITA1030H</td>
<td>Italian Lexicography</td>
</tr>
<tr>
<td>ITA1031H</td>
<td>History of Italian Language in North America</td>
</tr>
<tr>
<td>ITA1165H</td>
<td>Introduction to Italian Philology</td>
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<tr>
<td>ITA1177H</td>
<td>The Italian Questione della Lingua</td>
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<tr>
<td>ITA1200H</td>
<td>Dante</td>
</tr>
<tr>
<td>ITA1202H</td>
<td>Dante as a Reader of Augustine's City of God: Augustinian Textual Communities at the Beginning of the 14th Century</td>
</tr>
<tr>
<td>ITA1203H</td>
<td>Boccaccio</td>
</tr>
<tr>
<td>ITA1235H</td>
<td>Topics in Italian Studies</td>
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<tr>
<td>ITA1330H</td>
<td>Petrarch and Petrarchism</td>
</tr>
<tr>
<td>ITA1520H</td>
<td>Renaissance Humanism</td>
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<tr>
<td>ITA1535H</td>
<td>Topics in Italian Literature</td>
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<td>ITA1540H</td>
<td>Renaissance Italian Theatre</td>
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<td>ITA1550H</td>
<td>Sixteenth-Century Florence</td>
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<td>ITA1565H</td>
<td>Tasso</td>
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<td>ITA1591H</td>
<td>Baroque Poetics and Poetry</td>
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<td>ITA1597H</td>
<td>The Commedia dell'Arte</td>
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<td>ITA1601H</td>
<td>Vico</td>
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<tr>
<td>ITA1605H</td>
<td>Theories of the Stage and Dramatic Criticism</td>
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<td>ITA1610H</td>
<td>Seventeenth and Eighteenth-Century Theatre</td>
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<td>ITA1645H</td>
<td>Post-Tridentine Religious Drama</td>
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<tr>
<td>ITA1650H</td>
<td>Neoclassical and Pre-Romantic Literary Culture</td>
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<tr>
<td>ITA1705H</td>
<td>Pirandello</td>
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<tr>
<td>ITA1710H</td>
<td>Aspects of Modern Italian Poetry</td>
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<td>ITA1735H</td>
<td>Topics in Italian Studies I</td>
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<td>ITA1736H</td>
<td>Topics in Italian Studies II</td>
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<td>ITA1737H</td>
<td>Topics in Italian Studies</td>
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<td>ITA1755H</td>
<td>Italian Modernism</td>
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<td>ITA1760H</td>
<td>Futurism</td>
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<tr>
<td>ITA1810H</td>
<td>Studies in Italian Literature and Film</td>
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<tr>
<td>ITA1820H</td>
<td>The Mediterranean Noir: A Transnational Approach</td>
</tr>
<tr>
<td>ITA1815H</td>
<td>Issues in Italian Film Historiography</td>
</tr>
</tbody>
</table>
Kinesiology

Kinesiology: Introduction

Faculty Affiliation

Kinesiology and Physical Education

Degree Programs

Kinesiology

MSc and PhD

Professional Kinesiology

MPK

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Cardiovascular Sciences
  - Kinesiology, MSc, PhD
- Health Services and Policy Research
  - Kinesiology, MSc, PhD
- Musculoskeletal Sciences
  - Kinesiology, MSc, PhD
- Public Health Policy
  - Kinesiology, MSc, PhD
- Sexual Diversity Studies
  - Kinesiology, MSc, PhD
- Women and Gender Studies
  - Kinesiology, MSc, PhD
- Women's Health
  - Kinesiology, MSc, PhD

Overview

The field of Kinesiology is interdisciplinary. All degree programs are for students interested in research, academic, and professional careers relating to:

- Applied/exercise/environmental physiology
- Biomechanics and ergonomics
- Health-care provision as a kinesiologist
- Metabolic and endocrinological aspects of physical activity
- Motor control and motor learning
- Muscle physiology
- Physical cultural aspects of sport and physical activity
- Physical fitness and athletic strength and conditioning
- Psychological aspects of sport and physical activity
- Psychophysiologica aspects of exercise and stress
- Women's health and physical activity.

Contact and Address

Web: kpe.utoronto.ca
Email: grad.kpe@utoronto.ca
Telephone: (416) 978-6087
Fax: (416) 971-2118

Graduate Department of Kinesiology
Faculty of Kinesiology and Physical Education
University of Toronto
55 Harbord Street
Toronto, Ontario M5S 2W6
Canada

Kinesiology: Graduate Faculty

Full Members

Amara, Catherine - BSc, MSc, PhD
Arbour, Kelly - BSc, MSc, PhD
Atkinson, Michael - BA, MA, PhD (Director of Graduate Studies)
Burkhart, Timothy - DrEng
Cairney, John - BA, MA, PhD
Chapman, Kenneth - MSc, MD
Chen, Joyce - BSc(PTh), BPHE, PhD, ScD
Corey, Paul - BSc, MA, PhD
Darnell, Simon - BA, MA, PhD
Faulkner, Guy - BE, MSc, DPhil
Fusco, Caroline - BA, MSc, PhD
Gillen, Jenna - BPHE, PhD
Goodman, Jack - BPHE, MSc, PhD
Heslegrave, Ronald - PhD
Hutchison, Michael - BPHE, MSc, PhD
Ira - MHK, MD, DipPE
Joseph, Janelle - BSc, MSc, PhD
Kerr, Gretchen - BPHE, MA, PhD (Dean)
Kirkham, Amy - DSc
Lenskyj, Helen - BA, MA, PhD
Locke, Marius - BA, BSc, PhD
MacNeill, Margaret - BPHE, MA, PhD
Mainwaring, Lynda - BA, BHK, MHK, PhD, CPsych
Moore, Daniel - BASc, PhD
Sabiston, Catherine - BS, MA, PhD
Shek, Pang - BSc, MSc, PhD
Tamminen, Katherine - BA, MA, PhD
Thomas, Scott - BSc, MSc, PhD
Tremblay, Luc - BSc, MSc, PhD (Associate Dean, Research)
Trinh, Linda - AB, MA, PhD
Welsh, Timothy - BPHE, MSc, PhD

Members Emeriti

Donnelly, Peter - BA, MS, PhD
Kidd, Bruce - BA, AM, MA, PhD, OC
Leith, Larry - BA, MA, PhD
Radomski, Manny - PhD
Shepheard, Roy - BSc, BS, MB, MD, PhD
Kinesiology: Kinesiology MSc

Master of Science

Program Description

The MSc program is intended to broaden students' understanding of the various interdisciplinary aspects of kinesiology as well as to provide them with the necessary scholarly and technical research skills so that they may pursue a high-quality research project.

The MSc program can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Kinesiology's additional admission requirements stated below.
- An appropriate Bachelor of Physical Health Education, Bachelor of Kinesiology, or its equivalent from the University of Toronto or from another recognized university.
- A background in physical education and health or a discipline compatible with the research interests and interdisciplinary nature of the Faculty of Kinesiology and Physical Education is preferred.
- An academic standing equivalent to a University of Toronto B+ (76% to 79%) in the last five full-course equivalents of relevant, senior-level courses.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduate from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

Program Requirements

- Coursework. Successful completion of 2.0 full-course equivalents (FCEs) as follows. All courses must be approved in advance by the student's supervisor and the Graduate Department of Kinesiology.
  - 0.5 FCE in Kinesiology
  - 0.5 FCE Statistics or Methodology course
  - 1.0 FCE from either Kinesiology or another department
- SRM3335H+, a graduate seminar in Kinesiology (0.0 FCE).
- A thesis written under the supervision of a thesis committee and its oral defence before an examination committee.
- The student's annual program plan must be approved by the supervisor.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
12 sessions part-time

Time Limit

3 years full-time;
6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Kinesiology: Kinesiology PhD

Doctor of Philosophy

Program Description

Doctoral students are encouraged to develop a program of study that will enhance their basic understanding of critical areas of study within kinesiology and have a direct impact on their research program. Students are also expected to further develop their scholarly and technical research skills so that they may pursue a high-quality research project.

Applicants may enter the PhD program via one of two routes: 1) following completion of an MSc degree; or 2) direct entry following completion of a BSc degree.
The PhD program can be taken on a full-time or flexible-time basis.

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Kinesiology's additional admission requirements stated below.
- A master's degree from the University of Toronto or a recognized university. Formal graduate training in kinesiology is preferred.
- Successful defence of a master's thesis at a recognized university.
- An academic standing equivalent to a University of Toronto A– (80% to 84%) in the master's degree completed.
- A potential supervisor identified from the Faculty of Kinesiology and Physical Education. A supervisor is not required at the time of application, but applicants are encouraged to begin their search early. See the full list of faculty members. Only applicants who have a supervisor will be admitted to the program.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.
- A background in kinesiology or a discipline compatible with the research interests and interdisciplinary nature of the Faculty of Kinesiology and Physical Education is preferred.
- An appropriate Bachelor of Kinesiology degree or its equivalent from the University of Toronto or from another recognized university.
- A potential supervisor identified from the Faculty of Kinesiology and Physical Education. A supervisor is not required at the time of application, but applicants are encouraged to begin their search early. See the full list of faculty members. Only applicants who have a supervisor will be admitted to the program.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

**Program Requirements**

- Full-time registration (Fall, Spring, Summer sessions) throughout the entire doctoral program.
- **Coursework.** Students must successfully complete a total of 1.5 full-course equivalents (FCEs) as follows:
  - 1.0 FCE from either Kinesiology or another department
  - 0.5 FCE Statistics or Methodology course
- SRD4445H*, a graduate seminar in Kinesiology (0.0 FCE).
- All courses must be approved in advance by the student's supervisor.
- The student's annual program plan must be approved by the supervisor.
- Successful completion of a comprehensive examination.
- Writing of a thesis under the supervision of a thesis committee (supervisor plus at least three additional faculty members) and its defence before an examination committee appointed by the Graduate Department of Kinesiology.
- Oral defence of the thesis before an examination committee approved by the School of Graduate Studies.

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Kinesiology's additional admission requirements stated below.
- An appropriate Bachelor of Kinesiology degree or its equivalent from the University of Toronto or from another recognized university.
- A background in kinesiology or a discipline compatible with the research interests and interdisciplinary nature of the Faculty of Kinesiology and Physical Education is preferred.
- An academic standing equivalent to a University of Toronto A– (80% to 84%) in the last five full-course equivalents of relevant, senior-level courses.
- A potential supervisor identified from the Faculty of Kinesiology and Physical Education. A supervisor is not required at the time of application, but applicants are encouraged to begin their search early. See the full list of faculty members. Only applicants who have a supervisor will be admitted to the program.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

**Program Requirements**

- Full-time registration (Fall, Spring, Summer sessions) throughout the entire doctoral program.
- **Coursework.** Students must successfully complete a total of 2.5 full-course equivalents (FCEs) as follows. All courses must be approved in advance by the student's supervisor.
  - 2.0 FCEs from either Kinesiology or another department
  - 0.5 FCE Statistics or Methodology course
- SRD4445H*, a graduate seminar in Kinesiology (0.0 FCE).

**Program Length**

- 4 years

**Time Limit**

- 6 years

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
All courses must be approved in advance by the student's supervisor.

The student's annual program plan must be approved by the supervisor.

Successful completion of a comprehensive examination.

Writing of a thesis under the supervision of a thesis committee (supervisor plus at least three additional faculty members) and its defence before an examination committee appointed by the Graduate Department of Kinesiology.

Oral defence of the thesis before an examination committee approved by the School of Graduate Studies.

Program Length

5 years

Time Limit

7 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Kinesiology’s additional admission requirements stated below.
- A master’s degree from the University of Toronto or a recognized university. Formal graduate training in kinesiology is preferred.
- Successful defence of a master’s thesis at a recognized university.
- An academic standing equivalent to a University of Toronto A– (80% to 84%) in the master’s degree completed.
- A potential supervisor identified from the Faculty of Kinesiology and Physical Education. A supervisor is not required at the time of application, but applicants are encouraged to begin their search early. See the full list of faculty members. Only applicants who have a supervisor will be admitted to the program.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

Program Requirements

- With the approval of the Director, Graduate Studies, some applicants may be admitted to a flexible-time PhD program. This program will benefit mature students with career and/or familial obligations.
- Degree requirements for the flexible-time program are identical to those listed above for the full-time PhD program; however, students have up to eight years to complete the program.
- Coursework. Students must successfully complete a total of 1.5 full-course equivalents (FCEs) as follows:
  - 1.0 FCE from either Kinesiology or another department
  - 0.5 FCE Statistics or Methodology course
- SRD4445H+, a graduate seminar in Kinesiology (0.0 FCE).
- All courses must be approved in advance by the student's supervisor.
- The student's annual program plan must be approved by the supervisor.
- Successful completion of a comprehensive examination.
- Writing of a thesis under the supervision of a thesis committee (supervisor plus at least three additional faculty members) and its defence before an examination committee appointed by the Graduate Department of Kinesiology.
- Oral defence of the thesis before an examination committee approved by the School of Graduate Studies.
- Flexible-time students must register full-time for the first four years of the program. Thereafter, they may register part-time.
- A plan of study and research activities will be negotiated at initial registration, to be reviewed and updated annually.

Program Length

6 years

Time Limit

8 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Kinesiology: Kinesiology MSc, PhD Courses

Not all courses are offered every year. Please visit the departmental website for course timetables.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN1150H</td>
<td>Safeguarding Youth in Sport</td>
</tr>
<tr>
<td>KIN1152H</td>
<td>Psychological Issues in Sport-Related Concussion</td>
</tr>
<tr>
<td>KIN5502H</td>
<td>Aging and Functional Capacity: an Integrative Approach</td>
</tr>
<tr>
<td>KIN5503H</td>
<td>Adaptations to Habitual Activity</td>
</tr>
</tbody>
</table>
Kinesiology: Professional Kinesiology MPK

Master of Professional Kinesiology

Program Description

The first master’s-level program of its kind in Ontario, the Master of Professional Kinesiology (MPK) degree program offers students an opportunity to gain advanced knowledge and skills in the professional practice of kinesiology. The MPK provides unparalleled learning environments for hands-on practice working alongside leading practitioners. This program is suitable for those who are just beginning their careers, and those who have experience as registered kinesiologists and are looking for advanced professional development. The MPK program may be completed with a concentration or without a concentration.

Concentrations

- Adapted Physical Activity
- Exercise as Medicine
- Health and Wellness
- High Performance Strength and Conditioning

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Graduate Department of Kinesiology's additional admission requirements stated below.
- Applicants must have a four-year bachelor's degree in kinesiology, physical education, human kinetics, or a complementary degree in health science, life science, and/or movement/rehabilitation science. In order to be eligible for admission with a complementary degree, practical experience in the area of kinesiology is required.
- Applicants may also be considered for admission with a four-year bachelor’s degree in an area not described above, with at least 5 years of work experience in the area of kinesiology, and evidence of professional training or certification in the area of kinesiology (for example, strength and conditioning certification, physical literacy certification).
- Regardless of the admission pathway, all applicants must have a minimum mid-B average (73% to 76%) in the final year.
- Resumé.
- Two letters of reference. At least one letter must be from an academic referee.
- Letter of intent which identifies the area of interest and reasons for pursuing the program.
- Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The Faculty prefers the Test of English as a Foreign Language (TOEFL), with the following minimum scores:
  - paper-based test: 600 with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE);
Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

Program Requirements

- **Coursework.** Students must successfully complete a total of **12.0 full-course equivalents (FCEs)** as listed below. Consult the department for more details on sequence and timing of courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPK4000Y</td>
<td>Introduction to Professional Kinesiology</td>
</tr>
<tr>
<td>MPK4001Y</td>
<td>Clinical Assessment and Interventions</td>
</tr>
<tr>
<td>MPK4002Y</td>
<td>Biophysical Assessment and Interventions</td>
</tr>
<tr>
<td>MPK4003Y</td>
<td>Behavioral Assessment and Interventions</td>
</tr>
<tr>
<td>MPK4004Y</td>
<td>Physical, Culture, Health, and Social Environments</td>
</tr>
<tr>
<td>MPK4005Y</td>
<td>Strength Based Professional Practice</td>
</tr>
<tr>
<td>MPK4006H</td>
<td>Interprofessional Practice</td>
</tr>
<tr>
<td>MPK4007Y</td>
<td>Practice Setting Considerations</td>
</tr>
<tr>
<td>MPK4008Y</td>
<td>Evidence Supported Practice</td>
</tr>
<tr>
<td>MPK4009H</td>
<td>Business of Kinesiology and Entrepreneurship</td>
</tr>
<tr>
<td>MPK4010H</td>
<td>Professional Practice</td>
</tr>
<tr>
<td>MPK4012Y</td>
<td>Capstone Project: Improving Kinesiology Practice</td>
</tr>
<tr>
<td>MPK4015H</td>
<td>Practice and Program Evaluation</td>
</tr>
<tr>
<td>MPK8002H</td>
<td>Placement 1 (300 hours)</td>
</tr>
<tr>
<td>MPK8003H</td>
<td>Placement 2 (300 hours)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Concentration Requirements

- Students must follow departmental application procedures and can apply to only one MPK concentration.
- Students must successfully complete a total of **3.0 full-course equivalents (FCEs)** in the area of concentration, including:
  - in at least 1.5 FCEs of MPK courses, complete a major course assignment in the area of concentration
  - a minimum of 300 placement hours in the area of concentration (0.5 FCE)
  - a final capstone project in the area of concentration (1.0 FCE).

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years
Laboratory Medicine and Pathobiology

LMP: Introduction

Faculty Affiliation

Medicine

Degree Programs

Laboratory Medicine

MHSc

- Fields:
  - Clinical Embryology;
  - Pathologists’ Assistant

Laboratory Medicine and Pathobiology

MSc and PhD

Translational Research in the Health Sciences

MHSc

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Cardiovascular Sciences
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Developmental Biology
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Genome Biology and Bioinformatics
  - Laboratory Medicine and Pathobiology, PhD
- Musculoskeletal Sciences
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Neuroscience
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Laboratory Medicine and Pathobiology, MSc, PhD
- Toxicology
  - Laboratory Medicine and Pathobiology, MSc, PhD

Overview

As part of the Faculty of Medicine, the Department of Laboratory Medicine and Pathobiology offers unparalleled access to more than 350 expert faculty including basic scientists, pathobiologists, laboratory physicians, and scientists; outstanding case material; a stunning array of research opportunities; diverse training sites; engaging student-run organizations.

Research Foci

- Antimicrobial Resistance: Surveillance and Mechanisms
- Bone and Connective Tissue Diseases including Disorders of Mineral Metabolism
- Cancer Pathogenesis and Prevention Cardiovascular Disease
- Cell-Matrix Interactions
- Development: Cell Cycle, Differentiation, Signalling Diabetes
- Endocrine and Neuroendocrine Disorders
- Hematopathology and Transfusion Medicine
- Immunopathology and Transplantation
- Inflammatory Disorders
- Lipid Disorders
- Lymphatic Pathobiology
- Microbial Pathogenesis
- Molecular Biomarkers
- Neurodegenerative Disorders
- Proteomics and Bioinformatics
- Protein Structure and Function
- Toxicology
- Translational Research
- Vascular Cell Biology
- Viral Diseases

For details, consult the departmental website.

Contact and Address

Laboratory Medicine and Pathobiology Program

Web: [www.lmp.utoronto.ca](http://www.lmp.utoronto.ca)
Email: [lmp.grad@utoronto.ca](mailto:lmp.grad@utoronto.ca)
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Department of Laboratory Medicine and Pathobiology
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Translational Research in the Health Sciences Program

Web: [trp.utoronto.ca](http://trp.utoronto.ca)
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Telephone: (416) 978-4474
Laboratory Medicine and Pathobiology:
Graduate Faculty

Full Members

Abdelhaleem, Mohamed - MSc, MBChB, PhD
Adeli, Khosrow - DipChem, MSc, PhD
Andrulis, Irene - BA, PhD
Aubert, Isabelle - BSc, PhD
Bapat, Bharati - BSc, MSc, PhD
Barber, Dwayne - BSc, PhD
Bartlett, John M.S. - PhD
Bendick, Michelle - BSc, PhD
Boggis, Joan - MSc, PhD
Bozec, Laurent - BSc, PhD
Branch, Donald - BA, BSc, PhD
Bremner, Roderick Angus - BSc, PhD
Brown, Martha - BSc, MSc, PhD
Brown, Theodore - BSc, PhD
Buchan, Alison - BSc, MSc, PhD
Chandran, Vinod - MBBS, PhD
Coburn, Bryan - BSc, DrMed
Cole, David - BSc, MD, PhD
Connelly, Philip - BA, PhD
Crowcroft, Natasha - BA, MA, MSc, MBBS, PhD
Cutz, Ernest - MD
Cybulsky, Myron - MD
Das, Sunit - DrMed
Dennis, James - PhD
Diamandis, Eleftherios - BSc, MD, PhD
Diamandis, Phedias - BS, MD, PhD
Dirks, Peter Benjamin - MD, PhD
Dittakavi, Sarma - BSc, MSc, PhD
Done, Susan - BA, BCh, MB, MA, MBA, PhD
Drucker, Daniel - MD
Elsholtz, Harry - BSc, MSc, PhD (Coordinator of Graduate Studies)
Epelman, Slava - MD, DrMed
Fairn, Gregory - BSc, PhD
Gallagher, Steven - MSc, MD
Gilbert, Richard - MBBS, PhD
Girardin, Stephen - BSc, PhD
Gotlieb, Avrum - BSc, MDCM
Grynpas, Marc - MSc, PhD
Hamel, Paul - BSc, PhD
Hamilton, Robert - BSc, MD, PhD
Harrison, Rene - BS, MS, PhD
Hawkins, Cynthia - MD, PhD
Hazarati, Lili-Naz - BSc, MSc, MD, PhD
Hedley, David - MD
Hegele, Richard - MD
Hinek, Aleksander - MD, PhD
Hu, Jim - BSc, PhD
Huang, Annie - MD
Husain, Mansoor - MB, MD
Hwang, David - BSc, MD, PhD
Irwin, David - BSc, PhD
Jamieson, Frances - MD
Jarvi, Keith - MD
Jothy, Serge - MSc, MD, PhD
Juvet, Stephen - DrMed, PhD
Kain, Kevin - MD
Kalia, Lorraine - BSc, MD, PhD
Kalia, Sunil - BSc, MD, PhD
Kandel, Rita - MD (Chair and Graduate Chair)
Kapoor, Mohit - BPhm, MSc, PhD
Khokha, Rama - BSc, MSc, PhD
Kovacs, Gabor - MD, PhD
Laflamme, Michael - BS, MD, PhD
Lee, Jeffrey - BSc, PhD
Lee, Warren - MD, PhD
Levy, Gary - BSc, MD
Licht, Christoph - MD
Lingwood, Clifford - BSc, PhD
Marsden, Philip  - MD
Mazzulli, Tony - MD
McCulloch, Christopher - BSc, DDS, PhD
McGeer, Allison - BSc, MSc, MD
McKerlie, Colin - DVSM, DVM
McLaurin, Joanne - BSc, MSc, PhD
Mekhail, Karim - BSc, PhD
Mitchell, Jennifer - DSc
Mogridge, Jeremy - BSc, PhD
Moriarty, Tara - BA, BSc, PhD
Ni, Heyu - MSc, MD, PhD
Ohn, Michael - BSc, PhD
Opas, Michal - MSc, PhD
Ostrowski, Mario - MD
Palaniyar, Nades - MSc, PhD
Post, Martin - PhD
Poutanen, Susan - MPH, MD
Pritzker, Kenneth - BSc, MD
Prud'homme, Gerald - MD
Rajalakshmi, Srinivasaan - BSc, MA, PhD
Rand, Margaret - BSc, PhD
Richardson, Susan - BSc, MDCM
Robbins, Clinton Shane - BS, PhD
Robertson, Janice - BSc, PhD
Rosenblum, Norman - MD
Rozakas-Adcock, Maria - BSc, PhD
Rudzicz, Frank - PhD
Rutka, James - BSc, LMCC, MD, PhD
Schmitt-Ulms, Gerold - BSc, MSc, DrRerNat
Scott, James - BSc, PhD
Semple, John - PhD
Seth, Arun - MS, PhD
Shaw, Patricia - SB, MD
Sherman, Philip - MD
Shlien, Adam - BS, PhD
Singh, Karun - PhD
Sivak, Jeremy - PhD
Strauss, Bradley - MD
Swallow, Carol - BA, MD, PhD
Taylor, Michael - BSc, DrMed, PhD
Templeton, Douglas - BSc, MD, PhD
Tenenbaum, Howard - DipPerio, DDS, PhD
Thorner, Paul - MD, DPhil
Tsao, Ming-Sound - BSc, MD
van der Kwast, Theodorus - MD, PhD
Wang, Bo - BS, MS, PhD
Wang, Chen - MD, PhD
Wilson, Gregory - MSc, MD
Winer, Daniel - BS, MD
Wong, Pui-Yuen - BSc, PhD
Yang, Burton - BSc, MSc, PhD
Yousef, George - MSc, MD, PhD
Yucel, Yeni - MD  
Yuen, Darren - BSc, MD, PhD  
Yuzwa, Scott - BS, PhD  
Zacksenhaus, Eldad - PhD  
Zhang, Li - MSc, MD, PhD  

Members Emeriti  
Butany, Jagdish - MBBS, MS  
Marks, Alexander - MD, PhD  
Shek, Pang - BSc, MSc, PhD  
Yeger, Herman - BSc, MScPhm, PhD  

Associate Members  
Berman, Hal K. - MD, PhD  
Bowman, Kerry - BA, BSW, MSW, PhD  
Callum, Jeannie - BA, MD  
Chadwick, Dianne - BS, MSc, PhD  
Chang, Hong - MSc, MD, PhD  
Changoor, Adele - BS, MS, PhD  
Charames, George - BS, MS, PhD  
Chronis-Brown, Pat - BTech, MSc  
Dickson, Brendan C. - BSc, MSc, MD  
Drabovich, Andrei - MS, PhD  
Faragalla, Hala - MS, MD, MBChB  
Ferenbok, Joseph - PhD, PhD  
Fittipaldi, Nahuel Vicente - BS, MS, PhD  
Gao, Andrew - BSc, MSc, MD  
Gauda, Estelle - MD  
Ghaffar, Hasan - BSc, MD  
Gnaneshan, Saravanamutty - BS, PhD  
Greenblatt, Ellen - BSc, MD  
Greenfeld, Elena - MD, PhD  
Gubbay, Jonathan B. - BSc, MSc, MBBS  
Hojilla, Carlo - BS, MD, PhD  
Hurtig, Mark - MSc, DVM  
Jones, Claire - BSc, MD  
Karoubi, Golnaz - BSc, PhD  
Keating, Sarah - MSc, MD  
Kingdom, John - DipCH, MB, MD  
Kongkham, Paul - BSc, MD, PhD  
Konvalinka, Ana - DrMed  
Kulasingam, Vathany - BSc, PhD  
Kus, Julienne - BS, MS, PhD  
Lerner-Ellis, Jordan - BS, PhD  
Li, Ren-Ke - MHSc, MSc, MD, PhD  
Liu, Kimberly - BA, MD  
Madjunkova, Svetlana - MSc, MD, PhD  
Melano, Roberto - MSc, PhD  
Mete, Ozgur - MD  
Millar, Adam - BSc, MSc, MD  
Moraes, Theo - MD  
Moskovtsev, Sergey - MD, PhD  
Mubareka, Samira - MD  
Mullen, J. Brendan - BSc, MD  
Munoz, David - MSc, MD  
Ng, Dominic - MD  
Nguyen, Lananh - BA, MS, MD  
Noor, Abdul - BS, MPH, PhD  
Ogawa, Shinichiro - MD, PhD  
Parks, William - AB, MD  
Pasic, Maria - BS, PhD  
Pavenski, Katerina - BSc, MD  
Polianen, Michael - BSc, MD, PhD  
Putra, Juan - MD  
Radovanovic, Ivan - MD, PhD  
Riddell, Robert - LMCC, LRCP, MBBS  
Saleeb, Rola - MBChB, PhD  
Shapiro, Heather - BSc, MD  
Simor, Andrew - MD  
Snelgrove, John - BSc, MSc, MD  
So, Joyce - MD, PhD  
Somers, Gino - MBBS, BMedSc, PhD  
Spears, Melanie - BS, PhD  
Stavropoulos, Dimitri James - BSc, MSc, PhD  
Stockley, Tracy - BSc, PhD  
Sung, Hoon-Ki - MS, MD, PhD  
Tein, Ingrid - MD  
Thu, Kelsie - BSc, PhD  
Tran, Vanessa - BSc, PhD  
Tsui, Hubert - BSc, MD, PhD  
Weinreb, Ilan - MD  
Wong, Amy - BS, MS, PhD  
Zhang, Lingxin - MBBS  

LMP: Laboratory Medicine MHSc  

Master of Health Science  

Program Description  
The Master of Health Science (MHSc) in Laboratory Medicine is a two-year professional (coursework and practicum) master's degree designed to educate and train highly skilled health laboratory scientists in one of two fields: Pathologists' Assistant (PA) or Clinical Embryology (CE). The program imparts general core knowledge and skills and the specific basic and applied principles of anatomic pathology or of assisted reproductive technology (ART) required to work as laboratory scientists. These principles are the foundation upon which PAs or CEs develop fundamental applied and practical knowledge and skills to function as competent, high-quality clinical scientists. 

The nature of this graduate program equips trainees to apply their knowledge to complex decision making, to serious ethical issues, and to develop a strong sense of personal accountability and intellectual rigour and independence. 

Minimum Admission Requirements  
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Laboratory Medicine and Pathobiology's additional admission requirements stated below. 
- Admission is based on demonstrated exceptional scholarly achievement, using the following criteria:  
  - One-page statement summarizing how this program will contribute to the advancement of the applicant's professional goals, identifying their field of preference.  
  - Curriculum vitae (CV).  
  - Two letters of reference, one of which should be familiar with the applicant's scholarly activities. 
- Applicants must have an appropriate BSc degree from a recognized university, with an average of at least B+ in the last two years of study. Applicants must have a demonstrated interest in human biological and life
Applicants who were educated outside Canada, whose primary language is not English and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of the following tests:

- **Test of English as a Foreign Language (TOEFL)** with the following minimum required scores: Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
- **International English Language Testing Systems (IELTS)** required score: 8.0 (Academic) with at least 6.5 for each component.
- **Certificate of English Proficiency (COPE)** with the following minimum required scores: 86 total with 22 on the listening component, 22 on the reading component, and 32 on the writing component.
- **School of Continuing Studies, University of Toronto, Academic English course**. Required score: a final grade of B in Level 60 (Advanced).

### Program Requirements

#### Field: Clinical Embryology

- **Coursework.** Students must successfully complete a total of 9.5 full-course equivalents (FCEs) as follows:
  - 4.0 FCEs taken by all students:
    - LMP2000H *Cell and Molecular Biology* (0.5 FCE)
    - LMP2001H *Biomedical Research Methods* (0.5 FCE)
    - LMP2002H *Clinical Laboratory Management* (0.5 FCE)
    - LMP2003H *Biomedical Ethics* (0.5 FCE)
    - LMP2004H *Biostatistics* (0.5 FCE)
    - LMP2005Y* Capstone Project in Laboratory Medicine* (1.0 FCE)
  - 0.5 elective FCE chosen from a course offered in LMP or any other graduate department, with approval of the field director.
  - 4.0 FCEs specific to this field:
    - LMP2100H *Advanced Reproductive Physiology and Pathology* (0.5 FCE)
    - LMP2102H *Foundations in ART (Assisted Reproductive Technology)* (0.5 FCE)
    - LMP2103H *Reproductive Genetics* (0.5 FCE)
    - LMP2104H *Applied Methods in ART* (0.5 FCE)
    - LMP2105H *Innovations in ART* (0.5 FCE)
    - LMP2106H *Current Topics in Causes and Treatment of Infertility* (0.5 FCE)
    - LMP2107H *Applied ART Laboratory Decision Making* (0.5 FCE)

### Field: Pathologists’ Assistant

- **Coursework.** Students must successfully complete a total of 9.5 full-course equivalents (FCEs) as follows:
  - 4.0 FCEs taken by all students:
    - LMP2000H *Cell and Molecular Biology* (0.5 FCE)
    - LMP2001H *Biomedical Research Methods* (0.5 FCE)
    - LMP2002H *Clinical Laboratory Management* (0.5 FCE)
    - LMP2003H *Biomedical Ethics* (0.5 FCE)
    - LMP2004H *Biostatistics* (0.5 FCE)
    - LMP2005Y* Capstone Project in Laboratory Medicine* (1.0 FCE)
  - 0.5 elective FCE chosen from a course offered in LMP or any other graduate department, with approval of the field director.
  - 1.5 FCEs specific to this field:
    - LMP2200H *Basic Principles in Human Pathobiology and Pathophysiology* (0.5 FCE)
    - LMP2201H *Anatomy and Pathology of Organ Systems* (0.5 FCE)
    - LMP2208H *Biobanking for Research* (0.5 FCE).
  - 4.0 FCEs of practicum courses
    - LMP2202H *Practicum in Surgical Pathology I* (0.5 FCE)
    - LMP2203H *Practicum in Surgical Pathology II* (0.5 FCE)
    - LMP2204H *Practicum in Surgical Pathology III* (0.5 FCE)
    - LMP2205H *Practicum in Surgical Pathology IV* (0.5 FCE)
    - LMP2206H *Practicum in Autopsy Pathology* (0.5 FCE)
    - LMP2207H *Practicum in Forensic Pathology I* (0.5 FCE)
    - LMP2209H *Practicum in Surgical Pathology V* (0.5 FCE)
    - LMP2210H *Practicum in Surgical Pathology VI* (0.5 FCE).

- Students who fail a course will be offered remediation in the form of additional readings and assignments by the course director. If a student fails two courses or the offered remediation, they will be required to repeat the year.

### Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

### Time Limit

3 years full-time
LMP: Laboratory Medicine MHSc Courses

Not all courses are offered every year. Please check the departmental website for course availability.

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP2000H</td>
<td>Cell and Molecular Biology</td>
</tr>
<tr>
<td>LMP2001H</td>
<td>Biomedical Research Methods</td>
</tr>
<tr>
<td>LMP2002H</td>
<td>Clinical Laboratory Management</td>
</tr>
<tr>
<td>LMP2003H</td>
<td>Biomedical Ethics</td>
</tr>
<tr>
<td>LMP2004H</td>
<td>Biostatistics</td>
</tr>
</tbody>
</table>

Clinical Embryology Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP2100H</td>
<td>Advanced Reproductive Physiology and Pathology</td>
</tr>
<tr>
<td>LMP2102H</td>
<td>Foundations in ART (Assisted Reproductive Technology) <em>(prerequisite: LMP2100H)</em></td>
</tr>
<tr>
<td>LMP2103H</td>
<td>Reproductive Genetics <em>(prerequisites: LMP2000H, LMP2100H)</em></td>
</tr>
<tr>
<td>LMP2104H</td>
<td>Applied Methods in ART <em>(prerequisite: LMP2102H)</em></td>
</tr>
<tr>
<td>LMP2106H</td>
<td>Current Topics in Causes and Treatment of Infertility <em>(prerequisites: LMP2100H, LMP2102H)</em></td>
</tr>
<tr>
<td>LMP2108H</td>
<td>Clinical Embryology Laboratory Simulation I <em>(prerequisites: LMP2102H, LMP2104H, LMP2107H)</em></td>
</tr>
</tbody>
</table>

Pathologists' Assistant Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP2200H</td>
<td>Basic Principles in Human Pathobiology and Pathophysiology</td>
</tr>
<tr>
<td>LMP2201H</td>
<td>Anatomy and Pathology of Organ Systems</td>
</tr>
<tr>
<td>LMP2202H</td>
<td>Practicum in Surgical Pathology I</td>
</tr>
<tr>
<td>LMP2203H</td>
<td>Practicum in Surgical Pathology II</td>
</tr>
<tr>
<td>LMP2204H</td>
<td>Practicum in Surgical Pathology III</td>
</tr>
<tr>
<td>LMP2205H</td>
<td>Practicum in Surgical Pathology IV</td>
</tr>
<tr>
<td>LMP2206H</td>
<td>Practicum in Autopsy Pathology</td>
</tr>
<tr>
<td>LMP2207H</td>
<td>Practicum in Forensic Pathology</td>
</tr>
<tr>
<td>LMP2208H</td>
<td>Biobanking for Research</td>
</tr>
<tr>
<td>LMP2209H</td>
<td>Practicum in Surgical Pathology V</td>
</tr>
<tr>
<td>LMP2210H</td>
<td>Practicum in Surgical Pathology VI</td>
</tr>
<tr>
<td>LMP2211H</td>
<td>Advanced Anatomy Dissection <em>(prerequisite: LMP2200H)</em></td>
</tr>
</tbody>
</table>

LMP: Laboratory Medicine and Pathobiology MSc

Master of Science

Program Description

The MSc program emphasizes the development of analytical technologies, the application of basic research techniques in biochemistry, cell biology, clinical biochemistry, experimental pathology, genetics, immunology, and molecular biology to the study of mechanisms of cell and tissue injury and the pathogenesis of disease. The program also emphasizes the nature, mechanisms, therapy, and prevention of microbial diseases in humans, as well as the processes by which pathogenic microbes are spread.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Laboratory Medicine and Pathobiology's additional admission requirements stated below.
Applicants must have completed, or be about to complete, one of the following:
- Pathobiology Specialist program
- an appropriate bachelor's degree in life sciences from a recognized university
- professional degree (e.g., MD, DDS, DVM, or equivalent).
- A minimum A– average over the final two years of undergraduate study.
- Two strong letters of recommendation from faculty members familiar with the applicant's academic work.
- Detailed curriculum vitae (CV).
- Statement of intent (approximately 250 words).
- Research experience evidenced by publications, abstracts, or presentations is an asset.

Successful applicants are selected by the departmental admissions committee on the basis of academic excellence.

Admission is finalized when a graduate faculty member agrees to supervise the student's research and guarantees a full stipend for the student.

**Program Requirements**

- **Coursework.** Students must complete 1.5 full-course equivalents (FCEs) as follows:
  - LMP1005H *Fundamentals of Research Practice* (0.5 FCE)
  - LMP1001H *Student Seminar I* (0.5 FCE; Credit/No Credit) and LMP1002H *Student Seminar II* (0.5 FCE; Credit/No Credit).

- Completion of a thesis (RST9999Y) under the direction of the student's supervisor, assisted by the advisory committee.

- The research content of the MSc thesis is expected to generate the equivalent of one paper published in a peer-reviewed scientific journal.

- **Residence.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

5 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W)

**Time Limit**

3 years full-time

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Laboratory Medicine and Pathobiology's additional admission requirements stated below.
- Research experience evidenced by peer-reviewed publications, abstracts, or presentations is normally required.
- Three strong letters of recommendation from faculty members familiar with the applicant's academic work. Normally, one of the referees should be the applicant's research supervisor.
- A detailed curriculum vitae (CV).
- Statement of intent (approximately 250 words).
- Applicants are selected by the departmental admissions committee on the basis of academic excellence. Admission to the program is finalized when a graduate faculty member agrees to supervise the student's research and guarantees a full stipend for the student.
- A limited number of selected students may enter the MD/PhD program subject to admission into both the departmental PhD program and the MD program.

**Program Requirements**

- **Coursework.** Students must complete 1.0 full-course equivalent (FCE) as follows:
  - LMP1003H/ Student Seminar III (0.5 FCE; Credit/No Credit)
  - an additional 0.5 elective FCE.
- The PhD thesis (RST9999Y) is completed under the direction of the candidate's supervisor, assisted by the advisory committee. The PhD thesis must demonstrate a substantial contribution to laboratory medicine and pathobiology, involving a systematic investigation of disease-related hypotheses. The emphasis is on quality of the science and its presentation. The PhD thesis is normally expected to yield the equivalent of three publications in refereed scientific journals.
• **Residence.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

4 years

**Time Limit**

6 years

*Course that may continue over a program. Credit is given when the course is completed.*

**PhD Program (Transfer)**

**Transfer Requirements**

Transfer applicants must:

- Be enrolled in the MSc program in Laboratory Medicine and Pathobiology. Excellent students with high academic standing (normally a minimum A– average on MSc courses) who have clearly demonstrated the ability to do research at the doctoral level may be considered for transfer to the PhD program. Recommendation of the advisory committee is required.
- Successfully complete a reclassification transfer exam within 24 months of starting the MSc Program.
- Successfully complete LMP1001H *Student Seminar I* and LMP1005H *Fundamentals of Research Practice* at the master’s level.
- Be concurrently enrolled in LMP1002H *Student Seminar II* at the time of writing the reclassification exam.

**Program Requirements**

- **Coursework.** Students must complete 2.5 full-course equivalents (FCEs) as follows:
  - LMP1005H *Fundamentals of Research Practice* (0.5 FCE; Credit/No Credit)
  - LMP1001H *Student Seminar I* (0.5 FCE; Credit/No Credit)
  - LMP1002H *Student Seminar II* (0.5 FCE; Credit/No Credit)
  - LMP1003H* Student Seminar III* (0.5 FCE; Credit/No Credit)
  - an additional 0.5 elective FCE.
- The PhD *thesis* (RST9999Y) is completed under the direction of the candidate’s supervisor, assisted by the advisory committee. The candidate normally defends the thesis before a departmental committee, and subsequently before a committee approved by the School of Graduate Studies. Candidates may, with the recommendation of their advisory committee, request a waiver of the departmental defence, subject to approval by the Graduate Coordinator.
- The PhD thesis must demonstrate a substantial contribution to laboratory medicine and pathobiology, involving a systematic investigation of disease-related hypotheses. The emphasis is on quality of the science and its presentation. The PhD thesis is normally expected to yield the equivalent of three publications in refereed scientific journals.
- **Residence.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

5 years

**Time Limit**

7 years

*Course that may continue over a program. Credit is given when the course is completed.*

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Direct entry is available for highly qualified BSc graduates who have completed the Pathobiology Specialist program or an appropriate undergraduate program in the life sciences from a recognized university with a minimum A average in the final two years and relevant research experience.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Laboratory Medicine and Pathobiology’s additional admission requirements stated below.
- Research experience evidenced by peer-reviewed publications, abstracts, or presentations is normally required.
- Three strong letters of recommendation from faculty members familiar with the applicant’s academic work. Normally, one of the referees should be the applicant’s research supervisor.
- A detailed curriculum vitae (CV).
- Statement of intent (approximately 250 words).
- Applicants are selected by the departmental admissions committee on the basis of academic excellence. Admission to the program is finalized when a graduate faculty member agrees to supervise the student’s research and guarantees a full stipend for the student.

**Program Requirements**

- **Coursework.** Students must complete 2.5 full-course equivalents (FCEs) as follows:
  - LMP1005H *Fundamentals of Research Practice* (0.5 FCE; Credit/No Credit)
  - LMP1001H *Student Seminar I* (0.5 FCE; Credit/No Credit)
  - LMP1002H *Student Seminar II* (0.5 FCE; Credit/No Credit)
  - LMP1003H* Student Seminar III* (0.5 FCE; Credit/No Credit)
  - an additional 0.5 elective FCE.
- The PhD thesis (RST9999Y) is completed under the direction of the candidate's supervisor, assisted by the advisory committee. The candidate normally defends the thesis before a departmental committee, and subsequently before a committee approved by the School of Graduate Studies. Candidates may, with the recommendation of their advisory committee, request a waiver of the departmental defence, subject to approval by the Graduate Coordinator.
- The PhD thesis must demonstrate a substantial contribution to laboratory medicine and pathobiology, involving a systematic investigation of disease-related hypotheses. The emphasis is on quality of the science and its presentation. The PhD thesis is normally expected to yield the equivalent of three publications in refereed scientific journals.
- **Residence.** Students must be on campus and participating for the duration of their registration in the program.

**Program Length**

5 years

**Time Limit**

7 years

\*Course that may continue over a program. Credit is given when the course is completed.

### **LMP: Laboratory Medicine and Pathobiology**

#### MSc, PhD Courses

Not all courses are offered every year. Please check the departmental website for course availability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP1001H</td>
<td>Student Seminar I (Credit/No Credit)</td>
</tr>
<tr>
<td>LMP1002H</td>
<td>Student Seminar II (Credit/No Credit)</td>
</tr>
<tr>
<td>LMP1003H*</td>
<td>Student Seminar III (Credit/No Credit)</td>
</tr>
<tr>
<td>LMP1005H</td>
<td>Fundamentals of Research Practice (Credit/No Credit)</td>
</tr>
<tr>
<td>LMP1100H (0.25 FCE)</td>
<td>Cellular Imaging in Pathobiology</td>
</tr>
<tr>
<td>LMP1101H (0.25 FCE)</td>
<td>Basic Concepts in Inflammatory/Autoimmune Arthritis</td>
</tr>
<tr>
<td>LMP1102H (0.25 FCE)</td>
<td>Clinical Concepts in Inflammatory/Autoimmune Arthritis</td>
</tr>
<tr>
<td>LMP1103H (0.25 FCE)</td>
<td>Tissue Injury, Repair, and Regeneration</td>
</tr>
<tr>
<td>LMP1104H (0.25 FCE)</td>
<td>Current Understanding of Ischemic Heart Disease</td>
</tr>
<tr>
<td>LMP1105H (0.25 FCE)</td>
<td>Current Understanding of Atherosclerosis</td>
</tr>
<tr>
<td>LMP1106H (0.25 FCE)</td>
<td>Molecular Biology Techniques</td>
</tr>
<tr>
<td>LMP1107H (0.25 FCE)</td>
<td>Bioinformatics in LMP</td>
</tr>
<tr>
<td>LMP1108H (0.25 FCE)</td>
<td>Genomic Analysis in Medicine</td>
</tr>
<tr>
<td>LMP1109H (0.25 FCE)</td>
<td>Advanced Concepts in Cancer Biology</td>
</tr>
<tr>
<td>LMP1110H (0.25 FCE)</td>
<td>Neural Stem Cells: Brain Development and Maintenance</td>
</tr>
<tr>
<td>LMP1200H</td>
<td>Neoplasia</td>
</tr>
<tr>
<td>LMP1201H</td>
<td>Research Techniques in Molecular Biology and Pathobiology</td>
</tr>
<tr>
<td>LMP1202H</td>
<td>Inflammation, Immunity, and Immunopathology of Atherosclerosis</td>
</tr>
<tr>
<td>LMP1203H</td>
<td>Analytical Clinical Biochemistry: Basic Principles</td>
</tr>
<tr>
<td>LMP1204H</td>
<td>Translational Research in Pathobiology</td>
</tr>
<tr>
<td>LMP1205H</td>
<td>The Role of Genomics in the Era of Personalized Medicine</td>
</tr>
<tr>
<td>LMP1206H</td>
<td>Next Generation Genomics in Clinical Medicine</td>
</tr>
<tr>
<td>LMP1207H</td>
<td>Mass Spectrometry, Proteomics, and Their Clinical Applications</td>
</tr>
<tr>
<td>LMP1208H</td>
<td>Molecular Clinical Microbiology and Infectious Diseases</td>
</tr>
<tr>
<td>LMP1209H</td>
<td>Neurodegenerative Disease — Mechanisms, Models, and Methods</td>
</tr>
<tr>
<td>LMP1210H</td>
<td>Basic Principles of Machine Learning in Biomedical Research</td>
</tr>
<tr>
<td>LMP1300Y</td>
<td>General and Special Pathology (for Oral Pathology Residents only)</td>
</tr>
</tbody>
</table>

\*Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.

### **LMP: Translational Research in the Health Sciences MHSc**

#### Master of Health Science

**Program Description**

This two-year, course-based program is designed for interprofessional students from diverse backgrounds (such as medicine, life sciences, social sciences, engineering, design, and communications) who want to learn creative problem-solving skills, strategies, and competencies to translate (scientific)
knowledge into innovations that improve medicine, health, and care.

Through flexible coursework, team-based, real-world translational challenges, and extensive mentorship and networking, the department facilitates self-directed collaborative ‘learning by doing’: students gain experience, expertise, and practical insights into development and design processes, regulatory frameworks, and translational networks and strategies to develop, lead, test, and implement innovations. The program’s mission is to challenge students to think differently so that they learn to champion change in their communities and contexts.

This cohort-based program commences in September.

Minimum Admission Requirements

- Applicants are admitted on the basis of academic preparation, references, and motivation. All applicants must demonstrate exceptional scholarly achievement and significant research experience.
- An appropriate bachelor’s (BSc) degree or an MD degree from a recognized university, and academic credentials and background preparation appropriate to the area of study with an A– average in at least three of the four years.
- Applicants with significant research, industry, or government experience in professional health science or related social science, and/or academic research master’s or PhD are also encouraged to apply.
- The application must be accompanied by:
  - A current curriculum vitae (CV).
  - A letter of intent or statement of professional goals.
  - Three letters of reference.
- Applicants whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of the following English-language proficiency tests:
  - Test of English as a Foreign Language (TOEFL): a minimum score of 600 on the paper-based test and 5 on the Test of Written English (TWE); or a minimum score of 93/120 on the Internet-based test and 22/30 on the writing and speaking sections.
  - Tests must be completed in the year prior to application to the program.
- Deadline for receipt of applications is May 1 for international students and June 1 for domestic students. Admission spots are limited; not all applicants who meet the prerequisites will be admitted. Applicants are screened for eligibility and short-listed applicants will be interviewed.

Program Requirements

- Within this two-year, five-session program, students must complete a total of 8.0 full-course equivalents (FCEs) as follows:
  - Year 1:
    - LMP2300Y Foundations in Translational Research (1.0 FCE, Fall and Winter)
    - LMP2320H Overview of Methods in Practices and Contexts (0.5 FCE; Winter)
    - LMP2322H Information, Media, and Communication Literacy for the Sciences (0.5 FCE, Fall)
    - LMP2301Y Projects in Translational Research (1.0 FCE, Fall and Winter)
  - Year 2:
    - LMP2330Y+ Capstone Project in Translational Research (2.0 FCEs, Summer).
- LMP2330Y+ Capstone Project in Translational Research (2.0 FCEs, Summer): eight modular courses (0.25 FCE each).
- 1.0 elective FCE with approval from the Program Director.

Program Length

5 sessions full-time (F/W/S/F/W)

Time Limit

3 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

LMP: Translational Research in the Health Sciences MHSc Courses

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP2300Y</td>
<td>Foundations in Translational Research</td>
</tr>
<tr>
<td>LMP2301Y</td>
<td>Projects in Translational Research</td>
</tr>
<tr>
<td>LMP2320H</td>
<td>Overview of Methods in Practices and Contexts</td>
</tr>
<tr>
<td>LMP2322H</td>
<td>Information, Media, and Communication Literacy for the Sciences</td>
</tr>
<tr>
<td>LMP2330Y+</td>
<td>Capstone Project in Translational Research (2.0 FCEs)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Modular Courses (0.25 FCE each)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMP2340H</td>
<td>Project Management I</td>
</tr>
<tr>
<td>LMP2341H</td>
<td>Project Management II</td>
</tr>
<tr>
<td>LMP2342H</td>
<td>Intellectual Property Fundamentals</td>
</tr>
<tr>
<td>LMP2343H</td>
<td>Applied Intellectual Property</td>
</tr>
<tr>
<td>LMP2344H</td>
<td>Translational Thinking</td>
</tr>
<tr>
<td>LMP2345H</td>
<td>Procurement, Privacy, and Regulatory Affairs</td>
</tr>
<tr>
<td>LMP2346H</td>
<td>Grant Writing</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
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<td>-------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>LMP2347H</td>
<td>Economics of Healthcare</td>
</tr>
<tr>
<td>LMP2348H</td>
<td>Knowledge Translation and the Community</td>
</tr>
<tr>
<td>LMP2349H</td>
<td>Student Work and Research Module (SWARM)</td>
</tr>
<tr>
<td>LMP2350H</td>
<td>Professionalism</td>
</tr>
<tr>
<td>LMP2351H</td>
<td>Leadership</td>
</tr>
<tr>
<td>LMP2352H</td>
<td>Intrapreneurship, Entrepreneurship, and Business Model Design</td>
</tr>
<tr>
<td>LMP2353H</td>
<td>Introduction to AI in Healthcare</td>
</tr>
<tr>
<td>LMP2354H</td>
<td>Hacking Network</td>
</tr>
<tr>
<td>LMP2355H</td>
<td>Business Thinking (Credit/No Credit)</td>
</tr>
<tr>
<td>LMP2390H</td>
<td>Selected Topics (Credit/No Credit)</td>
</tr>
</tbody>
</table>
Law

Law: Introduction

Faculty Affiliation

Law

Degree Programs

Law

LLM

- Concentrations:
  - Business Law;
  - Criminal Law;
  - Health Law, Ethics and Policy;
  - Legal Theory

- Dual Degree Programs:
  - LLB (National University of Singapore) / LLM (University of Toronto);
  - LLB (Tsinghua University) / LLM (University of Toronto);
  - LLM (University of Toronto) / JM (Tsinghua University);
  - LLM (University of Toronto) / LLM (Tsinghua University)

MSL

SJD

Global Professional Law

GPLLM

- Concentrations:
  - Business Law;
  - Canadian Law in a Global Context;
  - Innovation, Law and Technology;
  - Law of Leadership

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Bioethics
  - Law, LLM, SJD
- Global Health (U of T Global Scholar)
  - Law, LLM, SJD
- Jewish Studies
  - Law, LLM, MSL, SJD
- Sexual Diversity Studies
  - Law, LLM, MSL, SJD
- Women and Gender Studies
  - Law, LLM, SJD

Overview

The international reputation of the law school’s faculty, their breadth of interests and approaches, and the intensive intellectual atmosphere, create outstanding opportunities for graduate students pursuing advanced degrees.

Law faculty members are some of the finest doctrinal and theoretical legal scholars in public and private law. The diversity of research interests amongst the faculty allows them to supervise graduate research in almost all areas of legal scholarship. The pluralistic academic community invites a variety of approaches to legal scholarship including, but not limited to, feminism and the law, law and economics, legal history, law and society, analytical jurisprudence, and critical legal theory. Over a third of the faculty are cross-appointed to other units — a commitment to interdisciplinary scholarship which encourages students to position their legal research within a broader, interdisciplinary context.

Strong relationships with faculty members are forged by the supervisory relationship, as well as through numerous informal opportunities to interact with faculty. The many workshops, lecture series, seminars and roundtables foster a dynamic intellectual environment. Through the Distinguished Visiting Faculty program, students have the opportunity to meet with and learn from some of the world’s finest legal scholars.

In addition to the formal study program, graduate students can participate in internships through Pro Bono Students Canada and the International Human Rights Program.

Inquiries should be directed to the Graduate Program Coordinator, Graduate Program, Faculty of Law at the address below.

Contact and Address

LLM, MSL, and SJD Program Inquiries

Web: www.law.utoronto.ca/academic-programs/graduate-programs
Email: law.graduate@utoronto.ca
Telephone: (416) 978-0213

University of Toronto Faculty of Law
Graduate Programs
Falconer Hall
78 Queen’s Park
Toronto, Ontario, M5S 2C5

GPLLM Program Inquiries

Web: gpllm.law.utoronto.ca
Email: admissions.gpllm@utoronto.ca
Telephone: (416) 978-1400

University of Toronto Faculty of Law
GPLLM Program
Falconer Hall
78 Queen’s Park
Toronto, Ontario, M5S 2C5
Law: Graduate Faculty

Full Members

Alarie, Benjamin - LLB, AB, LLM, MA, Osler Chair in Business Law
Anand, Anita - BA, LLB, MA, LLM
Austin, Lisa - BA, BSc, LLB, MA, Chair in Law and Economics of Intellectual Property
Benson, Peter - LLB, LLM, PhD
Brunnée, Jutta - LLM, SJD, James Marshall Tory Dean's Chair (Dean)
Chapman, Bruce - BA, LLB, PhD
Chiao, Vincent - BA, PhD, JD
Cossman, Brenda - LLB, LLM, Goodman/Schipper Chair
Dawood, Yasmin - BA, MA, JD, PhD
Drassinower, Abraham - BPhil, LLB, MA, PhD, Chair in Legal Ethical and Cultural Implications of Technological Innovation
Dubber, Markus - AB, JD
Duggan, Anthony - BA, LLB, LLM, LLB
Dyzenhaus, David - BA, LLB, DPhil
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Essert, Christopher - BA, LM, JD, SJD
Fadel, Mohammad - BA, JD, PhD
Fernandez, Angela - BA, LLB, LLM, MA, SJD
Flood, Colleen - LLB, SJD
Green, Andrew - LLB, BA, LLM, MA, PhD, Metcalf Chair in Environmental Law
Hadfield, Gillian - BA, JD, PhD, Schwartz/Reisman Chair in Capital Markets
Katz, Ariel - LLB, LLM, SJD
Katz, Larissa - BA, LLB, LLM, SJD, CRC
Knap, Karen - BSc, LLB, LLM, SJD
Langille, Brian A. - LLB, BCL, BA
Lee, Ian - LLB, BCom, LLM
Lemmens, Trudo - LLM, DCL, Dr. William M. Scholl Chair in Health Law and Policy
Macintosh, Jeffrey - BSc, LLB, LLM
Macklem, Patrick - BA, LLB, LLM, William C. Graham Chair in International Law and Development
Macklin, Audrey - BSc, LLB, LLM, Chair in International Human Rights Law
Moran, Mayo - BA, LLB, LLM, SJD
Moreau, Sophia - BA, BPhil, PhD, JD
Morgan, Edward - LLB, BA, LLM
Niblett, Anthony - BCom, PhD, CRC
Phillips, James - LLB, MA, PhD
Prado, Mariana - LLB, LLM, SJD
Reaume, Denise - BA, LLB, BCL
Ripstein, Arthur S. - BA, MA, LLM, PhD, Howard Beck, Q.C. Chair
Rittich, Kerry - BAmus, LLB, SJD
Roach, Kent - BA, LLB, LLM, The J. Robert S. Prichard and Ann E. Wilson Chair in Law and Public Policy
Rogerson, Carol - BA, LLB, MA, LLM
Satterthwaite, Emily - BEc, LLM, MA, JD
Schneiderman, David - BA, LLB, LLM
Shachar, Ayelet - LLB, BA, LLM, SJD
Shaffer, Martha - LLB, LLM, MACct
Stacey, Richard - LLB, BA, SJD
Stern, Simon - BA, JD, PhD, Chair in Electronic Commerce
Stewart, Hamish - BA, LLB, MA, PhD
Su, Anna - LLM, SJD, JD
Thorburn, Malcolm - BA, JD, MA, LLM, SJD (Associate Dean, Graduate Program)
Trebilcock, Michael - LLB, LLM

Members Emeriti

Brudner, Alan S. - BA, MA, PhD
Cook, Rebecca - BA, JD, LLM, MA, MPA, SJD
Dickens, Bernard - LLB, LLM, PhD
Friedland, Martin - BCom, LLB, PhD
Nedelsky, Jennifer R. - BA, MA, PhD

Associate Members

Acorn, Elizabeth - BA, MA, PhD, JD
Hirschl, Ran - BA, LLB, MA, MPH, PhD, CRC
Sanderson, Douglas - BA, LLM, JD
Spade, Dean - BA, JD

Law: Law LLM

Master of Laws

Program Description

The Master of Laws (LLM) is a one-year degree program that provides students with an opportunity for more profound study beyond their first law degree.

The LLM program can be thesis-intensive (with both a short or long thesis option) or coursework-only. The short and long thesis options are for law students who have demonstrated a strong potential for advanced research and original scholarship. The coursework-only option is for law students who wish to specialize in a specific area of law or explore common law at an advanced level.

Within the LLM program, students also have the option of applying to pursue one of four areas of concentration:

- LLM with a Concentration in Business Law
- LLM with a Concentration in Criminal Law
- LLM with a Concentration in Health Law, Ethics, and Policy
- LLM with a Concentration in Legal Theory.

Students accepted into a concentration will receive a designation on their transcript. There are a limited number of spots available for students in each concentration, and acceptance into the concentrations will be competitive.

The program is completed on a full-time basis. Part-time registration may be considered in exceptional circumstances.
LLM Program (No Concentration): Thesis Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have obtained a Bachelor of Laws or Juris Doctor degree from a recognized university, or the international equivalent of a law degree from a foreign institution. Applicants must have a minimum B+ average in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies, i.e., during the course of their entire law degree.
- Applicants whose primary language is not English and who obtained their admitting degree (Bachelor of Laws or Juris Doctor) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.

Program Requirements

- Students must complete a course of studies and a thesis which, combined, are valued at 24 credit hours (equivalent to 6.0 full-course equivalents [FCEs]).
- Students writing a short thesis must:
  - Complete 20 credit hours of coursework (equivalent to 5.0 FCEs); and
  - Write a thesis worth 4 credit hours (equivalent to 1.0 FCE), and approximately 45 pages or 13,000 words, under the supervision of a graduate faculty member.
- Students writing a long thesis must:
  - Complete 8 credit hours (equivalent to 2.0 FCEs) of coursework; and
  - Write a thesis worth 16 credit hours (equivalent to 4.0 FCEs), and approximately 175 pages or 52,000 words, under the supervision of a graduate faculty member.
- All thesis students must complete:
  - The mandatory graduate seminar for all LLM students who are writing a thesis: LAW1000H Alternative Approaches to Legal Scholarship (3 credits, or 0.75 FCE); and
  - The mandatory graduate seminar for all LLM students: LAW7572H LLM Seminar (1 credit, or 0.25 FCE).
- All coursework and the student's thesis are graded using the graduate grading scale as outlined in the University Assessment and Grading Practices Policy.
- The Faculty offers thesis students some flexibility regarding their thesis credits. Students writing a short thesis can choose to write a slightly longer thesis for additional credit, and students writing a long thesis can choose to write a slightly shorter thesis for fewer credits. Students who wish to reduce or increase their thesis credits should contact the graduate program coordinator before the Fall add/drop deadline.
- For those writing a thesis, the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the academic year of attendance; the thesis must be completed by July 31 of the academic year of attendance.
- With approval of the Associate Dean, Graduate Studies at the Faculty of Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the second academic year of attendance; the thesis must be completed by July 31 of the second academic year of attendance.
- Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time (exceptional circumstances only)

Time Limit

3 years full-time;
6 years part-time (exceptional circumstances only)

LLM Program (No Concentration): Coursework-Only Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have obtained a Bachelor of Laws or Juris Doctor degree from a recognized university, or the international equivalent of a law degree from a foreign institution. Applicants must have a minimum B+ average in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies, i.e., during the course of their entire law degree.
- Applicants whose primary language is not English and who obtained their admitting degree (Bachelor of Laws or Juris Doctor) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- All coursework and the student's thesis are graded using the graduate grading scale as outlined in the University Assessment and Grading Practices Policy.
- The Faculty offers thesis students some flexibility regarding their thesis credits. Students writing a short thesis can choose to write a slightly longer thesis for additional credit, and students writing a long thesis can choose to write a slightly shorter thesis for fewer credits. Students who wish to reduce or increase their thesis credits should contact the graduate program coordinator before the Fall add/drop deadline.
- For those writing a thesis, the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the academic year of attendance; the thesis must be completed by July 31 of the academic year of attendance.
- With approval of the Associate Dean, Graduate Studies at the Faculty of Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the second academic year of attendance; the thesis must be completed by July 31 of the second academic year of attendance.
- Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).
Program Requirements

- Students must complete a course of studies valued at 28 credit hours (equivalent to 7.0 full-course equivalents [FCEs]). In addition, students pursuing the coursework-only option must designate one course as their designated writing requirement course. Only courses requiring one or more written assignments of at least 3,500 words (combined) will qualify as designated writing requirement courses. LAW1000H Alternative Approaches to Legal Scholarship and LAW7572H LLM Seminar do not qualify as a designated writing requirement course.
- All students in the LLM program must complete the mandatory graduate seminar: LAW7572H LLM Seminar (1 credit, or 0.25 FCE);
- All coursework is graded using the graduate grading scale as outlined in the University Assessment and Grading Practices Policy.
- The coursework requirements for all courses apart from the designated writing requirement course must be completed by the Faculty’s Winter sessional deadlines of the academic year of attendance; the writing requirement must be fulfilled by July 31 of the academic year of attendance.
- With approval of the Associate Dean, Graduate Studies at the Faculty of Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the second academic year of attendance; the writing requirement must be completed by July 31 of the second academic year of attendance.
- Continuation in Year 2 of the part-time LLM program is subject to the Faculty of Law’s determination that the student has made satisfactory progress in Year 1 of the part-time LLM.
- Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 sessions part-time (exceptional circumstances only)

Time Limit

- 3 years full-time;
- 6 years part-time (exceptional circumstances only)

LLM Program (With a Concentration): Thesis Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.

- Applicants must have obtained a Bachelor of Laws or Juris Doctor degree from a recognized university, or the international equivalent of a law degree if from a foreign institution. Applicants must have a minimum B+ average in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies, i.e., during the course of their entire law degree.
- Applicants whose primary language is not English and who obtained their admitting degree (Bachelor of Laws or Juris Doctor) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.
- Applicants applying to one of the four areas of concentration must substantiate their interest in and suitability for the particular area of concentration in their statement of interest, letters of reference, and research proposal. Applicants may only apply to one of the areas of concentration. Applicants may be admitted into the LLM program without a concentration.

Program Requirements

- Students must complete a total of 24 credits (6.0 full-course equivalents [FCEs]) through a combination of coursework and the thesis. The thesis must be in the area of concentration into which the student was accepted.
- Students writing a short thesis and pursuing a concentration must:
  - Complete 20 credit hours of coursework (equivalent to 5.0 FCEs), at least 8 credits (equivalent to 2.0 FCEs) of which must be taken from a list of courses in the area of concentration, which will be provided annually on the program website. The remaining required credits can be satisfied with courses either within or outside the area of concentration.
  - Write a 4-credit hours thesis (equivalent to 1.0 FCE); that is, approximately 45 pages or 13,000 words in length, in the area of concentration under the supervision of a graduate faculty member.
- Students writing a long thesis and pursuing a concentration must:
  - Complete 8 credit hours of coursework (equivalent to 2.0 FCEs).
  - Write a thesis worth 16 credit hours (equivalent to 4.0 FCEs) and approximately 175 pages or 52,000 words in length, in the area of concentration under the supervision of a graduate faculty member.
Students pursuing the concentration in Legal Theory must complete the mandatory 3-credit course LAW7081H *Foundations of Legal Theory* (3 credits, or 0.75 FCE). This course will count towards the credits required for the area of concentration.

All thesis students must complete:
- The mandatory graduate seminar for all LLM students writing a thesis: LAW1000H *Alternative Approaches to Legal Scholarship* (3 credits, or 0.75 FCE).
- The mandatory graduate seminar for all LLM students: LAW7572H *LLM Seminar* (1 credit, or 0.25 FCE).

All coursework and the student's thesis are graded using the graduate grading scale as outlined in the University Assessment and Grading Practices Policy.

The Faculty offers thesis students some flexibility regarding their thesis credits. Students writing a short thesis can choose to write a slightly longer thesis for additional credit, and students writing a long thesis can choose to write a slightly shorter thesis for fewer credits. Students who wish to reduce or increase their thesis credits should contact the program coordinator before the Fall add/drop deadline.

For those writing a thesis, the coursework requirements must be completed by the Faculty's Winter sessional deadlines of the academic year of attendance; the thesis must be completed by July 31 of the academic year of attendance.

With approval of the Associate Dean, Graduate Studies at the Faculty of Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the second academic year of attendance; the thesis must be completed by July 31 of the second academic year of attendance.

Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).

**Program Length**

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time (exceptional circumstances only)

**Time Limit**

3 years full-time;
6 years part-time (exceptional circumstances only)

**LLM Program (With a Concentration): Coursework-Only Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have obtained a Bachelor of Laws or Juris Doctor degree from a recognized university, or the international equivalent of a law degree from a foreign institution. Applicants must have a minimum B+ average in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies, i.e., during the course of their entire law degree.
- Applicants whose primary language is not English and who obtained their admitting degree (Bachelor of Laws or Juris Doctor) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.
- Applicants applying to one of the four areas of concentration must substantiate their interest in and suitability for the particular area of concentration in their statement of interest, and their two letters of reference. Applicants may only apply to one of the areas of concentration. Applicants may be admitted into the LLM program without a concentration.

**Program Requirements**

- Students must complete a course of studies valued at 28 credit hours (equivalent to 7.0 full-course equivalents [FCEs]). In addition, students pursuing the coursework-only option must designate one course as their designated writing requirement course. Only courses requiring one or more written assignments of at least 3,500 words (combined) will qualify as designated writing requirement courses. LAW1000H *Alternative Approaches to Legal Scholarship*, LAW7572H *LLM Seminar*, and LAW7077H *Introduction to the Canadian Legal System* do not qualify as a designated writing requirement course.
- At least 12 of the credits (equivalent to 4.0 FCEs) must be completed from a list of courses in the area of concentration into which the student was accepted. A list of eligible courses will be provided annually on the program website.
- Students pursuing the concentration in Legal Theory must complete the mandatory 3-credit course, LAW7081H *Foundations of Legal Theory* (3 credits, or 0.75 FCE). This course will count towards the credits required for the area of concentration.
- The designated writing requirement course must be in the area of concentration.
- All students in the LLM program must complete the mandatory graduate seminar: LAW7572H *LLM Seminar* (1 credit, or 0.25 FCE).
- All coursework is graded using the graduate grading scale as outlined in the University Assessment and Grading Practices Policy.
- The coursework requirements for all courses apart from the designated writing requirement course must be completed by the Faculty’s Winter sessional deadlines of the academic year of attendance; the writing requirement must be fulfilled by July 31 of the academic year of attendance.
With approval of the Associate Dean, Graduate Studies at the Faculty of Law, the program may be taken on a part-time basis over two years, in which case the coursework requirements must be completed by the Faculty’s Winter sessional deadlines of the second academic year of attendance; the writing requirement must be completed by July 31 of the second academic year of attendance.

Continuation in Year 2 of the part-time LLM program is subject to the Faculty of Law’s determination that the student has made satisfactory progress in Year 1 of the part-time LLM studies.

Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time (exceptional circumstances only)

Time Limit

3 years full-time;
6 years part-time (exceptional circumstances only)

Law: Law MSL

Master of Studies in Law

Program Description

The Master of Studies in Law (MSL) program is designed for scholars with no prior training in law who wish to acquire a legal education and knowledge of law in order to add a legal dimension to scholarship in their own discipline.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have completed at least a master's degree, and preferably a doctorate, from a recognized university with a demonstrated high level of scholarship in a discipline related to law. Applicants must have a least a B+ average in their final year of study. Preference will be given to applicants who have maintained this average throughout their studies.
- Applicants whose primary language is not English and who obtained their admitting degree (graduate degree or doctorate) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.

Program Requirements

- MSL students must pursue a course of studies approved by the Faculty.
  - The course of studies will comprise at least 28 credit hours (7.0 full-course equivalents [FCEs]), and not more than 32 credit hours (equivalent to 8.0 FCEs), and will include at least three of the following subjects: contracts, torts, property, criminal law, constitutional law, and civil procedure.
  - Students must complete a research project of an interdisciplinary nature during their studies at the Faculty of Law. The project must be completed in the context of one of the courses that students are completing for credit.
  - A mandatory graduate seminar: LAW1000H Alternative Approaches to Legal Scholarship (3 credits, or 0.75 FCE).
  - In no circumstance will courses taken in the MSL program be accredited for the Juris Doctor (JD) program.
- Residence. Students must be in full-time attendance for two academic sessions (eight months, September to April).

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Law: Law LLM (Dual Degree: LLB National University of Singapore / LLM)

Dual Degree Program: Bachelor of Laws (National University of Singapore) / Master of Laws (University of Toronto)

Program Description

This dual degree program is offered as part of the Master of Laws (LLM)’s coursework-only option, with or without a concentration. Students are not eligible to take the thesis option.
Students complete three years of a Bachelor of Laws (LLB) from the National University of Singapore (NUS), and in Year 4 complete the LLM degree at the University of Toronto. Students complete the LLB and LLM degrees in four years rather than the five years it would take to attain them separately. See the LLM coursework requirements (with or without a concentration) above.

Upon successful completion of the degree requirements of both programs, students receive a Bachelor of Laws degree and a Master of Laws degree.

Contact

Bachelor of Laws Program
Faculty of Law, National University of Singapore
Email: lawUGadmi@nus.edu.sg

Master of Laws Program
Faculty of Law, University of Toronto
Email: law.graduate@utoronto.ca

Application Process

- Initial consideration for admission to the dual degree program will be based on the applicant's performance during the first three terms of the NUS LLB program.
- All offers of admission to the dual degree program will be conditional upon successful completion of all Year 1, 2, and 3 requirements of the LLB program before starting the LLM program.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law's additional admission requirements stated below.
- Successful completion of the first three years of the NUS LLB program, with the equivalent of a B+ average. Preference will be given to those who maintain this average throughout their legal studies.
- Applicants applying to one of the four areas of concentration must substantiate their interest in and suitability for the particular area of concentration in their statement of interest, and their two letters of reference. Applicants may only apply to one of the areas of concentration. Applicants may be admitted into the LLM program without a concentration.
- Residence. Students must be in attendance for at least two academic sessions (eight months, September to April).

Law: Law LLM (Dual Degree: LLB Tsinghua University / LLM)

Dual Degree Program: Bachelor of Laws (Tsinghua University) / Master of Laws (University of Toronto)

Program Description

This dual degree program is offered as part of the Master of Laws (LLM)'s coursework-only option, with or without a concentration. Students are not eligible to take the thesis option.

Students complete two years of a Bachelor of Laws (LLB) from Tsinghua University, and in Year 3 complete the LLM degree at the University of Toronto.

Students complete the LLB and LLM degrees in four years rather than the five years it would take to attain them separately. See the LLM coursework requirements (with or without a concentration) above.

Upon successful completion of the degree requirements of both programs, students receive a Bachelor of Laws degree and a Master of Laws degree.

Contact

Bachelor of Laws Program
Law School, Tsinghua University
Email: to be confirmed

Master of Laws Program
Faculty of Law, University of Toronto
Email: law.graduate@utoronto.ca

Law: Law LLM (Dual Degree: LLM / JM Tsinghua University)

Dual Degree Program: Master of Laws (University of Toronto) / Juris Master (Tsinghua University)

Program Description

This dual degree program is offered as part of the Master of Laws (LLM)'s coursework-only option, with or without a concentration. Students are not eligible to take the thesis option.

Students complete the LLM and Juris Master (JM) degrees in three years and one session rather than the four years it would take to attain them separately. See the LLM coursework requirements (with or without a concentration) above.
• Years 1 and 2: students register in the Tsinghua University JM program.
• Fall session of Year 3: students register in the University of Toronto LLM program.
• Winter session of Year 3: students return to the Tsinghua University JM program.
• Fall session of Year 4: students register in the University of Toronto LLM program and complete the dual degree by the end of that session.

Upon successful completion of the degree requirements of both programs, students receive a Master of Laws degree and a Juris Master degree.

Contact
Juris Master Program
Law School, Tsinghua University
Email: to be confirmed

Master of Laws Program
Faculty of Law, University of Toronto
Email: law.graduate@utoronto.ca

Law: Law LLM (Dual Degree: LLM / LLM (Tsinghua University))

Dual Degree Program: Master of Laws (University of Toronto) / Master of Laws (Tsinghua University)

Program Description
This dual degree program is offered as part of the Master of Laws (LLM)'s coursework-only option, with or without a concentration. Students are not eligible to take the thesis option.

Students complete the two LLM degrees in two years and one session rather than the three years it would take to attain them separately. See the LLM coursework requirements (with or without a concentration) above.

• Year 1: students register in the Tsinghua University LLM program.
• Fall session of Year 2: students register in the University of Toronto LLM program.
• Winter session of Year 2: students return to the Tsinghua University LLM program.
• Fall session of Year 3: students register in the University of Toronto LLM program and complete the dual degree program by the end of that session.

Upon successful completion of the degree requirements of both programs, students receive the University of Toronto and Tsinghua University Master of Laws degree.

Law: Law SJD

Doctor of Juridical Science

Program Description
The Doctor of Juridical Science (SJD) is a thesis degree program for outstanding law students seeking to pursue careers in teaching, policy, and research. Students receive a guaranteed funding package for three years. Inquiries should be directed to the Graduate Program Coordinator, Graduate Program, Faculty of Law at the address above.

Applicants may enter the SJD program via one of two routes: 1) following completion of an appropriate Bachelor of Laws or Juris Doctor degree and a Master of Laws; or 2) direct entry following completion of an appropriate Bachelor of Laws or Juris Doctor degree.

SJD Program

Minimum Admission Requirements
• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law's additional admission requirements stated below.
• Applicants must have obtained a Bachelor of Laws or Juris Doctor degree and a Master of Laws degree from a recognized university, or the equivalent of each degree from an international institution. Applicants must have a minimum B+ average in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies.
• Applicants whose primary language is not English and who obtained their admitting degree (Master of Laws) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  o The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  o Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
Program Requirements

- **Coursework.** Students must complete the mandatory graduate seminar LAW1000H *Alternative Approaches to Legal Scholarship* (3 credits, or 0.75 full-course equivalents [FCEs]).
  - Other coursework requirements are optional and shall be determined upon consultation with the supervisor. All coursework shall be subject to the approval of the Associate Dean, Graduate Studies, Law.
- **Area requirement.** Before being allowed to proceed with formal research on a thesis topic, a student must demonstrate competence in a broader area within which the topic falls. The student’s supervisory committee (established by the student and approved by the Associate Dean of Graduate Studies at the Faculty of Law) assists in framing that area and compiling an appropriate plan for carrying out the research. The research undertaken by the student either culminates in a written exam, based on the reading list, or a research project, which is either a draft of a chapter of the thesis or an overview of the general argument. Both paths lead to an oral exam based on the written work and the reading list (the "area exam"). Unless approved by the Associate Dean of Graduate of Graduate Studies, a student must satisfy the area requirement by the end of Year 1 of registration.
- **Research and writing.** A student will not be allowed to continue in the doctoral program, where, in the opinion of the Area Committee, the student is not capable of demonstrating the capacity for independent legal research and writing at an advanced level, including through the satisfaction of the area exam.
- **Year 2 presentation.** At the end of Year 2 of registration, students must present an abstract of their work in progress or a draft chapter to an audience of their peers and interested faculty. The purpose of the meeting is to provide the student with a forum to collect feedback from a broad audience.
- **Annual meetings.** Students must meet with their entire supervisory committee at least once a year.
- **Thesis.** Following completion of the requirements above, a thesis must be prepared which, in the opinion of the Faculty of Law, constitutes a distinct contribution to legal research or scholarship, and the student must pass a Doctoral Final Oral Examination based on the thesis.
  - The thesis must be completed within five years from the date of enrolment in the program.
  - No candidate will be recommended for the degree until the thesis has been approved by the Faculty of Law and is presented in publishable form, as described in the PhD regulations in this calendar.
- **Residence.** Students must be in full-time attendance for at least two academic sessions (eight months):
  - September to April for those starting the program in September
  - January to April and September to December for those starting the program in January.

**Program Length**

- **3 years**

**Time Limit**

- **5 years**

**SJD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have obtained a Bachelor of Laws or Juris Doctor degree from a recognized university, or the equivalent of a law degree from an international institution. A minimum A– average is required in the final year of their legal studies. Preference will be given to applicants who maintain this average throughout their legal studies, i.e., during the course of their entire law degree.
- The Associate Dean, Graduate Studies at the Faculty of Law has the discretion to permit direct entry into the SJD following completion of the Bachelor of Laws or Juris Doctor degree where the Graduate Committee is satisfied that the applicant’s law record demonstrates excellent potential for independent legal research and writing at an advanced level.
- Applicants whose primary language is not English and who obtained their admitting degree (Bachelor of Laws or Juris Doctor) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The following are the most common tests:
  - The Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on the writing and speaking sections.
  - The International English Language Testing System (IELTS), Academic module, with an overall score of 7.5 with at least 7.0 in each component.
- No conditional offers of admission will be given based on successful completion of an English language test.

**Program Requirements**

- **Coursework.** Students must complete at least 8 credit hours (2.0 full-course equivalents [FCEs]) including the mandatory graduate seminar: LAW1000H *Alternative Approaches to Legal Scholarship* (3 credits, or 0.75 FCE).
  - All coursework shall be subject to the approval of the Associate Dean, Graduate Studies at the Faculty of Law.
• **Area requirement.** Before being allowed to proceed with formal research on a thesis topic, a student must demonstrate competence in a broader area within which the topic falls. The student's supervisory committee (established by the student and approved by the Associate Dean of Graduate Studies at the Faculty of Law) assists in framing that area and compiling an appropriate plan for carrying out the research. The research undertaken by the student either culminates in a written exam, based on the reading list, or a research project, which is either a draft of a chapter of the thesis or an overview of the general argument. Both paths lead to an oral exam based on the written work and the reading list (the "area exam"). Unless approved by the Associate Dean of Graduate Studies, a student must satisfy the area requirement by the end of Year 1 of registration.

• **Research and writing.** A student will not be allowed to continue in the doctoral program, where, in the opinion of the Area Committee, the student is not capable of demonstrating the capacity for independent legal research and writing at an advanced level, including through the satisfaction of the area exam.

• **Year 2 presentation.** At the end of Year 2 of registration, students must present an abstract of their work in progress or a draft chapter to an audience of their peers and interested faculty. The purpose of the meeting is to provide the student with a forum to collect feedback from a broad audience.

• **Annual meetings.** Students must meet with their entire supervisory committee at least once a year.

• **Thesis.** Following completion of the area requirements, a thesis must be prepared which, in the opinion of the Faculty of Law, constitutes a distinct contribution to legal research or scholarship, and the student must pass a Doctoral Final Oral Examination based on the thesis.
  - The thesis must be completed within six years from the date of enrolment in the program.
  - No candidate will be recommended for the degree until the thesis has been approved by the Faculty of Law and is presented in publishable form, as described in the PhD regulations in this calendar.

• **Residence.** Students must be in full-time attendance for at least two academic sessions (eight months):
  - September to April for those starting the program in September or
  - January to April and September to December for those starting the program in January.

### Program Length

5 years

### Time Limit

6 years

## Law: Law LLM, MSL, SJD Courses

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<td>Indigenous People and Canadian Courts: Advocacy, Evidentiary, and Ethical Issues</td>
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<td>LAW7109H</td>
<td>Intensive Course: Comparative Constitutional Law of Free Expression</td>
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<td>Intensive Course: snuw'yuulh: Indigenous Legal Traditions in the Coast Salish World</td>
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Law: Global Professional Law GPLLM

Global Professional Master of Laws

Program Description

The Global Professional Master of Laws (GPLLM) program is an executive graduate degree in law designed for (1) executives who wish to become more conversant in the substance and methodology of law; and (2) internationally trained lawyers who wish to become licensed to practise law in Canada. Courses are offered on alternating weekends: Friday evenings and all day Saturday.

The program may be completed in one year (three sessions with a F/W/S registration sequence) or through an extended full-time option that allows students to complete the program requirements over two years (six sessions with a F/W/S/F/W/S registration sequence).

The GPLLM offers the following concentrations:

- Business Law
- Canadian Law in a Global Context
- Innovation, Law and Technology
- Law of Leadership

Concentration: Business Law

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law’s additional admission requirements stated below.
- Applicants must have completed a Juris Doctor (JD), Bachelor of Laws (LLB), or a bachelor's degree (in law or another discipline) from a recognized university, with a minimum mid-B average or equivalent in their final year of study.
- Applicants must demonstrate a minimum of five years of full-time work experience.
- Applicants whose primary language is not English and who obtained their admitting degree (JD or LLB or undergraduate degree in any other discipline) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) are the most common tests:
  - TOEFL with the following minimum scores:
    - Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  - IELTS, Academic module: overall score of 7.5 with at least 7.0 in each component.
  - The Certificate of Proficiency in English (COPE): overall score of 86 with at least 22 in both the listening and reading components, 40 in the writing component, and 7 in the speaking component (Test of Oral Proficiency).
  - The University of Toronto Academic English preparation course: overall grade of A in Level 60.
  - Canadian Academic English Language (CAEL) Online: overall score of 70 with at least 70 in each component.

- No conditional offers of admission will be given based on successful completion of an English-language test.

Program Requirements

- Coursework: 30 credits (7.5 full-course equivalents [FCEs]), as follows:
  - One required 3-credit course (equivalent to 0.75 FCE) as follows:
    - LAW4001H Law and Business in a Global Economy
  - 12 credits (equivalent to 3.0 FCEs) consisting of four courses within this concentration worth 3 credits each (0.75 FCE total) from this list:
    - LAW4002H Comparative Corporate Governance
    - LAW4003H Securities Regulation and Corporate Finance
    - LAW4004H Mergers and Acquisitions
    - LAW4005H Canadian and Cross-Border Issues in Corporate Tax
    - LAW4006H International Dispute Resolution
    - LAW4011H Law and Policy of Public Private Partnerships
    - LAW4012H Intellectual Property Law
    - LAW4013H Economic and Social Regulation and Competition Law
    - LAW4014H International Insolvency Law
    - LAW4015H Organization of Transactional Legal Practice
    - LAW4018H Foundations of Legal Theory
    - LAW4019H Anti-Corruption Law: International, Domestic, and Practical Perspectives
    - LAW4032H Intellectual Property and Strategy
    - LAW4036H Applied Contract Law
    - LAW4053H Law and Regulation of Banks and Financial Institutions
    - LAW4057H Cannabis Law and Regulation
    - LAW4058H Competition Law
    - LAW4059H Digital Trade
  - 15 credits (equivalent to 3.75 FCEs) consisting of five courses worth 3 credits each (0.75 FCE total) from any concentration. Not all courses will necessarily be available every year. The program reserves the discretion to decline student requests to complete certain electives based on course enrolment or otherwise.
Full-Time Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Extended Full-Time Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Concentration: Canadian Law in a Global Context

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law's additional admission requirements stated below.
- Applicants must have completed a Juris Doctor (JD), Bachelor of Laws (LLB), or a bachelor's degree (in law or another discipline) from a recognized university, with a minimum mid-B average or equivalent in their final year of study.
- Applicants must demonstrate at least five years of full-time work experience. However, applicants without five years of full-time work experience may be eligible for admission. If admitted, they will only be eligible to enrol in courses within the Canadian Law in a Global Context concentration.
- Applicants whose primary language is not English and who obtained their admitting degree (JD or LLB or undergraduate degree in any other discipline) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) are the most common tests:
  - TOEFL with the following minimum scores:
    - Paper-based TOEFL: overall minimum score of 600, and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: overall minimum score of 100/120, and 24/30 on each section.
  - IELTS, Academic module: overall score of 7.5 with at least 7.0 in each component.
  - The Certificate of Proficiency in English (COPE): overall score of 86 with at least 22 in both the listening and reading components, 40 in the writing component, and 7 in the speaking component (Test of Oral Proficiency).
  - The University of Toronto Academic English preparation course: overall grade of A in Level 60.
  - Canadian Academic English Language (CAEL) Online: overall score of 70 with at least 70 in each component.
- No conditional offers of admission will be given based on successful completion of an English-language test.

Program Requirements

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs]), as follows:**
  - One required 3-credit course (equivalent to 0.75 FCE) as follows:
    - LAW4010H Foundations of Canadian Law
  - 12 credits (equivalent to 3.0 FCEs) consisting of four seminar courses within this concentration worth 3 credits each (0.75 FCE total) from this list:
    - LAW4007H Canadian Administrative Law
    - LAW4008H Canadian Constitutional Law
    - LAW4009H Canadian Criminal Law
    - LAW4017H Professional Responsibility
    - LAW4020H Property Law
    - LAW4021H Tort Law
    - LAW4022H Contract Law
    - LAW4023H Business Organizations
    - LAW4024H Applied Legal Research and Writing
    - LAW4051H Evidence Law
  - 15 credits (3.75 FCEs) consisting of five courses worth 3 credits each (0.75 FCE) from any concentration. Not all elective courses will necessarily be available every year. The program reserves the discretion to decline student requests to complete certain electives based on course enrolment or otherwise.

  **Note:** Canadian Law in a Global Context students without the minimum five years of full-time work experience may only select electives from within their concentration.

Full-Time Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Extended Full-Time Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Concentration: Innovation, Law and Technology

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law's additional admission requirements stated below.
- Applicants must have completed a Juris Doctor (JD), Bachelor of Laws (LLB), or a bachelor's degree (in law or another discipline) from a recognized university, with a minimum mid-B average or equivalent in their final year of study.
- Applicants must demonstrate a minimum of five years of full-time work experience.

- Applicants must demonstrate a minimum of five years of full-time work experience.
• Applicants should demonstrate an interest in technology and entrepreneurship in their application materials.
• Applicants whose primary language is not English and who obtained their admitting degree (JD or LLB or undergraduate degree in any other discipline) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) are the most common tests:
  o TOEFL with the following minimum scores:
    ▪ Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    ▪ Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  o IELTS, Academic module: overall score of 7.5 with at least 7.0 in each component.
  o The Certificate of Proficiency in English (COPE): overall score of 70 with at least 70 in each component.
  o The University of Toronto Academic English preparation course: overall grade of A in Level 60.
  o Canadian Academic English Language (CAEL) Online: overall score of 70 with at least 70 in each component.
• No conditional offers of admission will be given based on successful completion of an English-language test.

Program Requirements

• Coursework: 30 credits (7.5 full-course equivalents [FCEs]), as follows:
  o One required 3-credit course (equivalent to 0.75 FCE) as follows:
    ▪ LAW4026H The Law of Disruptive Technologies and Artificial Intelligence
  o 12 credits (equivalent to 3.0 FCEs) consisting of four courses within this concentration worth 3 credits each (0.75 FCE total) from this list:
    ▪ LAW4012H Intellectual Property Law
    ▪ LAW4027H Legal Technology and Informatics
    ▪ LAW4028H Blockchain, Digital Assets, and the Law
    ▪ LAW4029H Computational Law
    ▪ LAW4030H Financing Technological Innovation
    ▪ LAW4031H Cybersecurity and Data Protection in a Global Information Economy
    ▪ LAW4032H Intellectual Property and Strategy
    ▪ LAW4033H Design Thinking
    ▪ LAW4034H Launching Technology Ventures
    ▪ LAW4035H The Internet of Things
    ▪ LAW4036H Applied Contract Law
    ▪ LAW4046H Privacy and Data Governance
    ▪ LAW4047H The Legal Challenges of Digital Environments
    ▪ LAW4048H Health, Innovation, and the Law
    ▪ LAW4052H Law of Software Development and Commercialization
    ▪ LAW4055H Taxonomy of Innovation: Solving Business Problems and Reducing Legal Friction
  o 15 credits (equivalent to 3.75 FCEs) consisting of five courses worth 3 credits each (0.75 FCE total) from any concentration. Not all elective courses will necessarily be available every year. The program reserves the discretion to decline student requests to complete certain electives based on course enrolment or otherwise.

Full-Time Program Length
3 sessions full-time (typical registration sequence: F/W/S)

Extended Full-Time Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years full-time

Concentration: Law of Leadership

Admissions to the Law of Leadership concentration have been administratively suspended.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Law's additional admission requirements stated below.
• Applicants must have completed a Juris Doctor (JD), Bachelor of Laws (LLB), or a bachelor's degree (in law or another discipline) from a recognized university, with a minimum mid-B average or equivalent in their final year of study.
• Applicants must have a minimum of five years of full-time work experience.
• Applicants whose primary language is not English and who obtained their admitting degree (JD or LLB or undergraduate degree in any other discipline) from a university where the language of instruction and examination was not English must show evidence of English proficiency by submitting English-language test scores. Several English-language testing services are acceptable. The Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS) are the most common tests:
  o TOEFL with the following minimum scores:
    ▪ Paper-based TOEFL: minimum overall score of 600, and 5 on the Test of Written English (TWE)
    ▪ Internet-based TOEFL: minimum overall score of 100/120, and 24/30 on each section.
  o IELTS, Academic module: overall score of 7.5 with at least 7.0 in each component.
  o The Certificate of Proficiency in English (COPE): overall score of 86 with at least 22 in both the listening and reading components, 40 in the writing component, and 7 in the speaking component (Test of Oral Proficiency).
  o The University of Toronto Academic English preparation course: overall grade of A in Level 60.
Canadian Academic English Language (CAEL) Online: overall score of 70 with at least 70 in each component.

- No conditional offers of admission will be given based on successful completion of an English-language test.

Program Requirements

- **Coursework: 30 credits (7.5 full-course equivalents [FCEs])**, as follows:
  - One required 3-credit course (equivalent to 0.75 FCE) as follows:
    - LAW4050H Perspectives on Leadership and the Law
  - 12 credits (equivalent to 3.0 FCEs) consisting of four courses within this concentration worth 3 credits each (0.75 FCE) from this list:
    - LAW4016H Corporate Social Responsibility, Ethics, and the Law
    - LAW4036H Applied Contract Law
    - LAW4037H Procedural Fairness in Decision Making
    - LAW4038H Dispute Resolution and Negotiations
    - LAW4039H Law of the Workplace
    - LAW4040H Harassment, Discrimination, and the Duty to Accommodate
    - LAW4041H Health Law
    - LAW4042H Procurement Law
    - LAW4043H Privacy and Expression in the Digital Age
    - LAW4044H Education Law
    - LAW4045H Executive Compensation
    - LAW4049H Privacy and Freedom of Information
    - LAW4054H Management and Resolution of Legal Disputes
  - 15 credits (equivalent to 3.75 FCEs) consisting of five courses worth 3 credits each (0.75 FCE) from any concentration. Not all elective courses will necessarily be available every year. The program reserves the discretion to decline student requests to complete certain electives based on course enrolment or otherwise.

Full-Time Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Extended Full-Time Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

**Law: Global Professional Law GPLLM Courses**

All courses are offered in modules. A module will be approximately four months in length. Courses will be offered during the evening and on the weekend. A large portion of the learning for the modules will take place outside of class through carefully designed reading, assignments, projects, and group study.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>LAW4001H</td>
<td>Law and Business in a Global Economy</td>
</tr>
<tr>
<td>LAW4002H</td>
<td>Comparative Corporate Governance</td>
</tr>
<tr>
<td>LAW4003H</td>
<td>Securities Regulation and Corporate Finance</td>
</tr>
<tr>
<td>LAW4004H</td>
<td>Mergers and Acquisitions</td>
</tr>
<tr>
<td>LAW4005H</td>
<td>Canadian and Cross-Border Issues in Corporate Tax</td>
</tr>
<tr>
<td>LAW4006H</td>
<td>International Dispute Resolution</td>
</tr>
<tr>
<td>LAW4007H</td>
<td>Canadian Administrative Law</td>
</tr>
<tr>
<td>LAW4008H</td>
<td>Canadian Constitutional Law</td>
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<tr>
<td>LAW4009H</td>
<td>Canadian Criminal Law</td>
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<tr>
<td>LAW4010H</td>
<td>Foundations of Canadian Law</td>
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<tr>
<td>LAW4011H</td>
<td>Law and Policy of Public Private Partnerships</td>
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<tr>
<td>LAW4012H</td>
<td>Intellectual Property Law</td>
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<tr>
<td>LAW4013H</td>
<td>Economic and Social Regulation and Competition Law</td>
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<tr>
<td>LAW4014H</td>
<td>International Insolvency Law</td>
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<tr>
<td>LAW4015H</td>
<td>Organization of Transactional Legal Practice</td>
</tr>
<tr>
<td>LAW4016H</td>
<td>Corporate Social Responsibility, Ethics, and the Law</td>
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<tr>
<td>LAW4017H</td>
<td>Professional Responsibility</td>
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<tr>
<td>LAW4018H</td>
<td>Foundations of Legal Theory</td>
</tr>
<tr>
<td>LAW4019H</td>
<td>Anti-Corruption Law: International, Domestic, and Practical Perspectives</td>
</tr>
<tr>
<td>LAW4020H</td>
<td>Property Law</td>
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<tr>
<td>LAW4021H</td>
<td>Tort Law</td>
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<tr>
<td>LAW4022H</td>
<td>Contract Law</td>
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<tr>
<td>LAW4023H</td>
<td>Business Organizations</td>
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<tr>
<td>LAW4024H</td>
<td>Applied Legal Research and Writing</td>
</tr>
<tr>
<td>LAW4026H</td>
<td>The Law of Disruptive Technologies and Artificial Intelligence</td>
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<tr>
<td>LAW4027H</td>
<td>Legal Technology and Informatics</td>
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<tr>
<td>LAW4028H</td>
<td>Blockchain, Digital Assets, and the Law</td>
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<tr>
<td>LAW4029H</td>
<td>Computational Law</td>
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<tr>
<td>LAW4030H</td>
<td>Financing Technological Innovation</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>LAW4031H</td>
<td>Cybersecurity and Data Protection in a Global Information Economy</td>
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<tr>
<td>LAW4032H</td>
<td>Intellectual Property and Strategy</td>
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<tr>
<td>LAW4033H</td>
<td>Design Thinking</td>
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<tr>
<td>LAW4034H</td>
<td>Launching Technology Ventures</td>
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<tr>
<td>LAW4035H</td>
<td>The Internet of Things</td>
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<tr>
<td>LAW4036H</td>
<td>Applied Contract Law</td>
</tr>
<tr>
<td>LAW4037H</td>
<td>Procedural Fairness in Decision Making</td>
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<td>Privacy and Expression in the Digital Age</td>
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<td>Education Law</td>
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<td>LAW4045H</td>
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<tr>
<td>LAW4046H</td>
<td>Privacy and Data Governance</td>
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<tr>
<td>LAW4047H</td>
<td>The Legal Challenges of Digital Environments</td>
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<tr>
<td>LAW4048H</td>
<td>Health, Innovation, and the Law</td>
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<tr>
<td>LAW4049H</td>
<td>Privacy and Freedom of Information</td>
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<tr>
<td>LAW4050H</td>
<td>Perspectives on Leadership and the Law</td>
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<tr>
<td>LAW4051H</td>
<td>Evidence Law</td>
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<tr>
<td>LAW4052H</td>
<td>Law of Software Development and Commercialization</td>
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<tr>
<td>LAW4053H</td>
<td>Law and Regulation of Banks and Financial Institutions</td>
</tr>
<tr>
<td>LAW4054H</td>
<td>Management and Resolution of Legal Disputes</td>
</tr>
<tr>
<td>LAW4055H</td>
<td>Taxonomy of Innovation: Solving Business Problems and Reducing Legal Friction</td>
</tr>
<tr>
<td>LAW4056H</td>
<td>Crisis Management and Leadership</td>
</tr>
<tr>
<td>LAW4057H</td>
<td>Cannabis Law and Regulation</td>
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<tr>
<td>LAW4058H</td>
<td>Competition Law</td>
</tr>
<tr>
<td>LAW4059H</td>
<td>Digital Trade</td>
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</tbody>
</table>
Leadership, Higher and Adult Education

LHAE: Introduction

Faculty Affiliation

Ontario Institute for Studies in Education (OISE)

Degree Programs

Adult Education and Community Development

MA, MEd, and PhD

Educational Leadership and Policy

MA, MEd, EdD, and PhD

- Fields:
  - Educational Leadership and Policy;
  - International Educational Leadership and Policy (EdD only)

Higher Education

MA

- Field:
  - Higher Education

MEd

- Fields:
  - Education in the Professions;
  - Higher Education;
  - Higher Education Leadership;
  - Student Development and Student Services in Higher Education

EdD

- Field:
  - Higher Education

PhD

- Field:
  - Higher Education

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Aging, Palliative and Supportive Care Across the Life Course
  - Adult Education and Community Development, MA, MEd, PhD
- Community Development
  - Adult Education and Community Development, MA, MEd
- Comparative, International and Development Education
  - Adult Education and Community Development, MA, MEd, PhD
  - Educational Leadership and Policy, MA, MEd, EdD, PhD
  - Higher Education, MA, MEd, EdD, PhD
- Educational Policy
  - Adult Education and Community Development, MA, MEd, PhD
  - Educational Leadership and Policy, MA, MEd, EdD, PhD
  - Higher Education, MA, MEd, EdD, PhD
- Engineering Education
  - Higher Education, MA, MEd, PhD
- Environmental Studies
  - Adult Education and Community Development, MA, MEd, PhD
- Environment and Health
  - Adult Education and Community Development, MA, MEd, PhD
- Ethnic, Immigration and Pluralism Studies
  - Educational Leadership and Policy, MA, MEd, EdD, PhD
- Indigenous Health
  - Adult Education and Community Development, MA, MEd, PhD
- Sexual Diversity Studies
  - Adult Education and Community Development, MA, MEd, PhD
  - Educational Leadership and Policy, MA, MEd, EdD, PhD
  - Higher Education, MA, MEd, EdD, PhD
- Women and Gender Studies
  - Adult Education and Community Development, MA, MEd, PhD
  - Educational Leadership and Policy, MA, MEd, EdD, PhD
  - Higher Education, MA, MEd, EdD, PhD
- Workplace Learning and Social Change
  - Adult Education and Community Development, MA, MEd, PhD

Overview

Scholars in the Department of Leadership, Higher and Adult Education (LHAE) are engaged in a range of theoretical and practical areas: primary, secondary, and higher education leadership and administration; adult education; policy and change; social diversity; and community engagement. LHAE develops and organizes collaborative specializations in support of particular research areas of interest including those in policy, international development education, and workplace learning.
These collaborative specializations can be taken in conjunction with most OISE graduate programs.

Contact and Address

Admissions

Initial inquiries regarding admission to graduate studies in the Department of Leadership, Higher and Adult Education should be made directly to:

Web: www.oise.utoronto.ca/orss
Email: admissions.oise@utoronto.ca
Tel: (416) 978-4300
Fax: (416) 323-9964

Programs

Web: www.oise.utoronto.ca/lhae
Email: lhae.pa@utoronto.ca
Tel: (Admissions and Programs): (416) 978-0729

Leadership, Higher and Adult Education: Graduate Faculty

Full Members

Bascia, Nina - PhD (Chair and Graduate Chair)
Bialystok, Lauren - PhD
Buckner, Elizabeth - PhD
Campbell, Carol - BA, PhD
Childs, Ruth - BS, MA, PhD
Chmielewski, Anna Katyn - BA, MA, PhD
Davies, Scott - BA, MA, PhD
Flessa, Joseph - BA, MA, PhD
Goldstein, Tara - BA, PhD
Hayhoe, Ruth - BA, MA, PhD
Hildyard, Angela - BSc, MA, PhD
Janzen, Katharine - BS, BN, Med, EdD
Jones, Glen - BA, BEd, MEd, PhD
Lopez, Ann - BA, BE, MEd, PhD
Magnusson, Jamie-Lynn - BA, MA, PhD
McCready, Lance - BA, MA, PhD
Mirdchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD

Mundy, Karen - BA, MA, PhD
Niyozov, Sarfaroz - MEd, MA, PhD
Portelli, John - MEd, PhD
Restoule, Jean-Paul - BA, MA, DPhil
Sa, Creso - BA, MA, DPhil
Sawchuk, Peter - BSc, BEd, PhD
Vieta, Marcelo A. - BA, MA, PhD
Walcott, Rinaldo - BA, MA, PhD
Waterman, Stephanie - BA, MA, PhD
Wheelahan, Leesa - BA, MA, PhD
Zuker, Marvin - BA, LLB, MEd

Members Emeriti

Anderson, Stephen - BA, MA, PhD
Antone, Eileen - AB, BE, MEd, EdD
Chambers, Anthony - BS, MS, EdD
Gaskell, Jane - BA, EdD
Joshee, Reva - Blitt, MA, PhD
Lang, Daniel - BA, MAT, PhD
Leithwood, Kenneth - BA, BPHE, MPE, PhD
Miles, Angela - BA, MA, PhD
Muzzin, Linda - BA, MA, MPsy, PhD
Ryan, James - BEd, MEd, PhD
Skolnik, Michael - BPhil, BA, MA
Stiegelbauer, Suzanne - BS, MA, MA, PhD

Associate Members

Acton, Karen - DPhil
Belanger, Stephanie - PhD
Corral, Daniel - MS
Desai, Chandni - PhD
Desbiens, Brian - AB, MA, PhD
Diaz Rios, Claudia Milena - PhD
Drea, Catherine - AB, MA, EdD
Evans-Tokaryk, Tyler - PhD
Knight, Jane - PhD
Manion, Caroline - PhD
Mayes-Tang, Sarah - BSc, MS, PhD
Moodie, Gavin - PhD
Mosher, Janet - BMusA, LLB
Pan, Julia - BA, MEd, PhD
Ryan, Sherida - BTh, MA, PhD
Scullly-Stewart, Colleen Mary - BA, MEd, PhD
Sharratt, Lyn - BA, MEd, EdD
Stickel, Micah - BASc, MASc, PhD
Sumner, Jennifer - PhD
Tuters, Stephanie Diane - PhD
Wemigwans, Jennifer - DPhil
Wright, Sarah Robin - PhD

LHAE: Adult Education and Community Development MA

Master of Arts

Program Description
The MA is a research-based thesis degree program which can be taken on a full-time or part-time basis. The MA program focuses on learning that happens individually and collectively among adults in communities, workplaces, social movements, the street, and the virtual world — any place where people come together to create social change. The program serves individuals seeking to develop skills for education, community, and organizational roles in a wide range of settings in public, private, and voluntary sectors. Graduates work with newcomers, youth, women’s groups, LGBTQ agencies, organized labour, racialized people, and disenfranchised communities in positions that involve community engagement and education, policy development, leadership, mentorship, and organizational development. The department welcomes applicants with diverse but relevant backgrounds.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate bachelor's degree in a relevant discipline or professional program from a recognized university, with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- **Coursework.** Students must complete **4.0 full-course equivalents (FCEs)** as follows:
  - Either LHA1100H *Introduction to Adult Education* (0.5 FCE) or LHA1102H *Community Development: Innovative Models* (0.5 FCE).
  - LHA1183H *Master’s Thesis Seminar* (0.5 FCE).
  - At least one research methods course (0.5 FCE).
  - Elective coursework, of which at least 2.0 FCEs must be from the Adult Education and Community Development program. Additional courses may be required of some students.
- A **thesis** based on original research, which may lay the groundwork for doctoral research.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time

LHAE: Adult Education and Community Development MEd

Master of Education

Program Description

The MEd is a non-thesis, course-based professional degree program which can be taken on a full-time or part-time basis. The MEd program focuses on learning that happens individually and collectively among adults in communities, workplaces, social movements, the street, and the virtual world — any place where people come together to create social change. It serves individuals seeking to develop skills for education, community, and organizational development roles in a wide range of settings in public, private, and voluntary sectors. Graduates work with newcomers, youth, women’s groups, LGBTQ agencies, organized labour, racialized people, and disenfranchised communities in positions that involve community engagement and education, policy development, leadership, mentorship, and organizational development. The department welcomes applicants with diverse but relevant backgrounds.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate bachelor's degree in a relevant discipline or professional program from a recognized university, with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** as follows:
  - Either LHA1100H *Introduction to Adult Education* (0.5 FCE) or LHA1102H *Community Development: Innovative Models* (0.5 FCE).
  - Elective coursework, of which at least 2.5 FCEs must be from the Adult Education and Community Development program. Additional courses may be required of some students.
- One research methods course is recommended (0.5 FCE).

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time
LHAE: Adult Education and Community Development PhD

Doctor of Philosophy

Program Description

The PhD is a research-based thesis degree program which can be taken on a full-time or flexible-time basis. Designed to provide opportunities for advanced study in the theoretical foundations of adult education and community development and in the application of such knowledge to practice, the PhD focuses on learning that happens individually and collectively among adults in communities, workplaces, social movements, the street, and the virtual world — any place where people come together to create social change.

Except for the time to completion, requirements for both the full-time and flexible-time programs are the same. The department welcomes applicants with diverse but relevant backgrounds.

PhD Program (Full-Time Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate master's degree from a recognized university in a relevant discipline or professional program, with a minimum standing equivalent to a University of Toronto B+.
- Applicants who have completed an appropriate master's degree that did not include a thesis or research project are required to complete a Qualifying Research Paper (QRP) to a standard satisfactory to the admissions committee.

Program Requirements

- **Coursework.** Students must complete 3.0 full-course equivalents (FCEs) as follows:
  - LHA3102H+ *Doctoral Thesis Seminar* (0.5 FCE), recommended to be taken in the first session of the program.
  - At least 1.5 FCEs must be from the Adult Education and Community Development program. Students with little background in the area of Adult Education and Community Development may be required to complete an additional 0.5 FCE providing such background.
  - At least one research methods course (0.5 FCE).

- **Comprehensive requirement.** Normally, a major paper between 5,000 and 7,000 words in length (including tables, figures, and references), which consists of a comprehensive discussion of one or more literatures and/or debates of significance to Adult Education and Community Development.
- **Thesis.**

- Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
- Students cannot transfer between the full-time and flexible-time PhD options.
- Students cannot transfer between the EdD and PhD programs.

Program Length

4 years

Time Limit

6 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

PhD Program (Flexible-Time Option)

Applicants to the flexible-time option should be active professionals who demonstrate connections between their professional work and their proposed course program, and/or between their professional work and their proposed research. Capacity to secure blocks of time to enable concentrated study is required.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate master’s degree from a recognized university in a relevant discipline or professional program, with a minimum standing equivalent to a University of Toronto B+.
- Applicants who have completed an appropriate master’s degree that did not include a thesis or research project are required to complete a Qualifying Research Paper (QRP) to a standard satisfactory to the admissions committee.
- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities related to their proposed program of study.

Program Requirements

- **Coursework.** Students must complete 3.0 full-course equivalents (FCEs) as follows:
  - LHA3102H+ *Doctoral Thesis Seminar* (0.5 FCE), recommended to be taken in the first session of the program.
  - At least 1.5 FCEs must be from the Adult Education and Community Development program. Students with little background in the area of Adult Education and Community Development may be required to complete an additional 0.5 FCE providing such background.
  - At least one research methods course (0.5 FCE).
- **Comprehensive requirement.** Normally, a major paper between 5,000 and 7,000 words in length (including tables, figures, and references), which consists of a comprehensive discussion of one or more literatures and/or debates of significance to Adult Education and Community Development.

- **Thesis.**
- Students must register continuously until all degree requirements have been fulfilled. They register full-time during the first four years and may continue as part-time students thereafter, with their department's approval.
- Students cannot transfer between the full-time and flexible-time PhD options.
- Students cannot transfer between the EdD and PhD programs.

**Program Length**

6 years

**Time Limit**

8 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**LHAE: Adult Education and Community Development MA, MEd, PhD Courses**

Not all courses are offered every year. Please consult the course schedule posted on OISE's Office of the Registrar and Student Services' website.

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<th>Course Code</th>
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<tr>
<td>LHA1100H</td>
<td>Introduction to Adult Education</td>
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<tr>
<td>LHA1101H</td>
<td>Program Planning in Adult Education</td>
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<tr>
<td>LHA1102H</td>
<td>Community Development: Innovative Models</td>
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<tr>
<td>LHA1103H</td>
<td>Introduction to Research Methods in Adult Education (RM)</td>
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<tr>
<td>LHA1104H</td>
<td>Social Action Education — Community Development, Social Services, and Social Movements</td>
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<tr>
<td>LHA1105H</td>
<td>Introduction to Qualitative Research: Part I (RM)</td>
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<tr>
<td>LHA1106H</td>
<td>Introduction to Qualitative Research: Part II (RM)</td>
</tr>
<tr>
<td>LHA1107H</td>
<td>Developing and Leading High Performing Teams: Theory and Practice</td>
</tr>
<tr>
<td>LHA1108H</td>
<td>Adult Learning</td>
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<tr>
<td>LHA1109H</td>
<td>Creative Empowerment Work with the Disenfranchised</td>
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<tr>
<td>LHA1110H</td>
<td>Approaches to Teaching Adults</td>
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<tr>
<td>LHA1111H</td>
<td>Working with Survivors of Trauma</td>
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<td>LHA1113H</td>
<td>Gender and Race at Work</td>
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<td>LHA1114H</td>
<td>Commons, Community and Social Justice</td>
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<td>LHA1115H</td>
<td>Learning for the Global Economy</td>
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<td>LHA1119H</td>
<td>Creating a Learning Organization</td>
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<tr>
<td>LHA1122H</td>
<td>Practicum in Adult Education and Community Development (Credit/No Credit)</td>
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<tr>
<td>LHA1142H</td>
<td>Young Adulthood in Crisis: Learning, Transitions, and Activism</td>
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<tr>
<td>LHA1143H</td>
<td>Introduction to Feminist Perspectives on Society and Education</td>
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<tr>
<td>LHA1144H</td>
<td>Queer Interventions: Tools for Community Organizing</td>
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<tr>
<td>LHA1145H</td>
<td>Participatory Research in the Community and the Workplace (RM)</td>
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<tr>
<td>LHA1146H</td>
<td>Women, War, and Learning</td>
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<tr>
<td>LHA1147H</td>
<td>Women, Migration, and Work</td>
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<tr>
<td>LHA1148H</td>
<td>Introduction to Workplace, Organizational, and Economic Democracy</td>
</tr>
<tr>
<td>LHA1149H</td>
<td>Precarity and Dispossession: Urban Poverty and Rebel Cities</td>
</tr>
<tr>
<td>LHA1150H</td>
<td>Critical Perspectives on Organizational Change</td>
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<tr>
<td>LHA1152H</td>
<td>Individual Reading and Research in Adult Education: Master's Level</td>
</tr>
<tr>
<td>LHA1160H</td>
<td>Introduction to Transformative Learning Studies</td>
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<tr>
<td>LHA1171H</td>
<td>Foundations of Indigenous Education in Canada</td>
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<tr>
<td>LHA1180H</td>
<td>Indigenous Worldviews: Implications for Education</td>
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<tr>
<td>LHA1181H</td>
<td>Embodied Learning and Alternative Approaches to Community Wellness</td>
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<tr>
<td>LHA1182H</td>
<td>Nonprofits, Co-operatives, and the Social Economy: An Overview</td>
</tr>
<tr>
<td>LHA1183H*</td>
<td>Master’s Research Seminar (Credit/No Credit)</td>
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<tr>
<td>LHA1184H</td>
<td>Indigenous Knowledge: Implications for Education</td>
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<tr>
<td>LHA1185H</td>
<td>Leadership in Organizations: Changing Perspectives</td>
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<td>LHA1186H</td>
<td>Organizational Change in the Nonprofit and Public Sectors</td>
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<tr>
<td>LHA1190H</td>
<td>Community Healing and Peacebuilding</td>
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<tr>
<td>LHA1193H</td>
<td>Adult Education for Sustainability</td>
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<tr>
<td>LHA1194H</td>
<td>Cyberliteracy and Adult Education</td>
</tr>
</tbody>
</table>
### LHA1195H Technology @Work: The Internet in Workplace Learning and Change

### LHA1196H Walking Together, Talking Together: The Praxis of Reconciliation

### LHA1197H The Pedagogy of Food

### LHA3102H Doctoral Thesis Seminar (Credit/No Credit)

### LHA3104H Adult Education, Marxism, and Feminism

### LHA3133H Special Topics in Indigenous Community Learning

### LHA3152H Individual Reading and Research in Adult Education: Doctoral Level

### LHA3183H Introduction to Institutional Ethnography (RM)

### LHA3184H Indigenous Research Methodologies (RM)

### LHA5100H Special Topics in Adult Education and Community Development: Master's Level

### LHA6100H Special Topics in Adult Education and Community Development: Doctoral Level

### CIE1001H Introduction to Comparative, International, and Development Education

### CIE1002H Practicum in Comparative, International, and Development Education

### CIE1006H Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization

### CIE6000H Special Topics in Comparative, International, and Development Education

### WPL1131H Introduction to Workplace Learning and Social Change

### WPL2944H Sociology of Learning and Social Movements

### WPL3931H Advanced Studies in Workplace Learning and Social Change

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

### Interprogram Courses

The following course is accepted for credit in the Adult Education and Community Development program and will satisfy the program’s requirement. For descriptions, see the relevant programs.

### SJE1925H Indigenous Knowledge and Decolonization: Pedagogical Implications

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**LHAE: Educational Leadership and Policy MA**

**Master of Arts**

**Program Description**

The MA program in Educational Leadership and Policy fosters the study of problems in leadership and policy with respect to educational programs, with an emphasis on elementary and secondary schools. It will best serve students who have a commitment to scholarship and research as a means of deepening their understanding of leadership action in schools or in other educational and service institutions.

The MA is available through both full-time and part-time studies. While experience in teaching and administration is not an essential prerequisite for admission, such experience provides a desirable background. The department welcomes applicants with diverse but relevant backgrounds.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university in a relevant discipline or professional program, with a grade equivalent to a University of Toronto B+ or better in the final year.

**Program Requirements**

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - LHA1003H Designing Master's Research Proposals (0.5 FCE).
  - LHA1004H Research Literacy in Educational Leadership and Policy (0.5 FCE).
  - LHA1040H Introduction to Educational Leadership and Policy: Policy, Leadership, Change, and Diversity (0.5 FCE).
  - 0.5 FCE in research methods, to be selected in consultation with the thesis supervisor.
  - 2.0 elective FCEs in Educational Leadership and Policy courses, normally at the 1000 level or 5000 special topics level. Additional courses may be required of some students.

- **Thesis.** to be developed under the guidance of a faculty member.

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
10 sessions part-time
Time Limit

3 years full-time;
6 years part-time

LHAE: Educational Leadership and Policy
MEd

Master of Education

Program Description

The MEd program in Educational Leadership and Policy is designed primarily for students who are interested in learning the nature and practice of leadership and policy, especially with respect to social diversity and change in elementary and secondary schools. The MEd degree can be pursued on a part-time or full-time basis. While experience in teaching and administration is not an essential prerequisite for admission, such experience provides a desirable background. The department welcomes applicants with diverse but relevant backgrounds.

There are two MEd options available:

1. Coursework Only Option and

Students initially apply to and register in the Coursework Only Option. For registration in the Coursework Plus Major Research Paper Option, department permission is required.

The Coursework Only Option is available in two delivery models:

1. Regular MEd stream: students are accepted every year and can register on a full-time or part-time basis.
2. Online/Hybrid (part-time) Cohort-based stream: available in select years. Students move through the program as a cohort and register part-time. Applicants who are interested in the Online/Hybrid Cohort must specify their interest in this cohort in their Statement of Intent. However, due to limited space, admission to the MEd degree program does not guarantee membership in this cohort.

MEd Program (Coursework Only Option [Regular Delivery])

Minimum Admission Requirements

- An appropriate bachelor’s degree from a recognized university in a relevant discipline with a grade equivalent to a University of Toronto mid-B or better in the final year.
- Two letters of reference. Whenever possible, one should be written by an educational professional for whom the applicant has worked. The second should be by a referee who can attest to the applicant’s academic ability.

Program Requirements

- Coursework. Students must complete 5.0 full-course equivalents (FCEs) as follows:
  - LHA1004H Research Literacy in Educational Leadership and Policy (0.5 FCE), to be taken at the beginning of the program.
  - LHA1040H Introduction to Educational Leadership and Policy: Policy, Leadership, Change, and Diversity (0.5 FCE), to be taken at the beginning of the program.
  - 4.0 other FCEs, of which at least 2.0 FCEs must be from the Educational Leadership and Policy program, normally at the 1000 level or 5000 special topics level. Students may choose to focus on one of the four research areas: Policy, Leadership, Change, or Social Diversity.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time

MEd Program (Coursework Only Option [Online/Hybrid Delivery, Part-Time Only])

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university in a relevant discipline with a grade equivalent to a University of Toronto mid-B or better in the final year.
- Two letters of reference. Whenever possible, one should be written by an educational professional for whom the applicant has worked. The second should be by a referee who can attest to the applicant’s academic ability.

Program Requirements

- Coursework. Students must complete 5.0 full-course equivalents (FCEs) as follows:
MEd Program (Coursework Plus Major Research Paper Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in a relevant discipline with a grade equivalent to a University of Toronto mid-B or better in the final year.
- Two letters of reference. Whenever possible, one should be written by an educational professional for whom the applicant has worked. The second should be by a referee who can attest to the applicant's academic ability.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - LHA1003H Designing Master's Research Proposals (0.5 FCE). Part-time students are recommended to take this course towards the end of their program; full-time students are recommended to take it in Year 1.
  - LHA1040H Introduction to Educational Leadership and Policy: Policy, Leadership, Change, and Diversity (0.5 FCE), to be taken at the beginning of the program.
  - 3.0 other FCEs, of which at least 1.5 FCEs must be from the Educational Leadership and Policy program, normally at the 1000 level or 5000 special topics level. Students may choose to focus on one of the four research areas: Policy, Leadership, Change, or Social Diversity.
- **Major Research Paper (MRP):** LHA2001Y Major Research Paper to be carried out under the guidance of a faculty member.

Program Length

10 sessions part-time

Time Limit

6 years part-time

LHAE: Educational Leadership and Policy

EdD

Doctor of Education

Program Description

The EdD program in Educational Leadership and Policy is intended to shape highly competent leadership positions in school systems and other educational institutions. The program is specifically designed for working professional educators who want to develop the intellectual and research skills that will help them refine their practice as leaders in educational systems.

The EdD program is offered full-time in a cohort format. The department welcomes applicants with diverse but relevant backgrounds.

EdD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- Master's degree in the area of Educational Leadership and Policy or an equivalent degree with high academic standing from a recognized university.
- In addition to the Statement of Intent, a supplementary writing sample is required, which will help the admissions committee to assess an applicant's readiness to succeed in rigorous coursework and to conduct systematic research for the EdD. Applicants typically submit a master's-level Major Research Paper or thesis as their writing sample. Applicants who do not have a Major Research Paper or thesis must provide a writing sample that showcases their ability to write clearly and analytically about educational issues. Examples include a master's-level course paper, a policy document, and a professional publication.
• The applicant must be in a leadership position in education, or must have held a leadership position, or must demonstrate potential for leadership.

Program Requirements

• Coursework. Students must complete 4.0 core full-course equivalents (FCEs) as follows:
  o LHA3003H Designing Research Proposals in Educational Leadership and Policy (Credit/No Credit; 0.5 FCE).
  o LHA3004H Research and Literacy for the EdD Program (0.5 FCE).
  o LHA3005H Introduction to Research Methods for the EdD Program (0.5 FCE) or another research methods course.
  o LHA3006H Data Analysis for the Education Doctorate-RM (0.5 FCE) or another research methods course.
  o LHA3007H Literature Reviews for the EdD Program (0.5 FCE).
  o LHA3040H People and Power in Organizations (0.5 FCE).
  o LHA3041H Doctoral Seminar on Policy Issues in Education (0.5 FCE).
  o Additional 0.5 FCE at the 3000 level or 6000 special topics level.

• Comprehensive examination. Successful oral defence of a written portfolio that emphasizes reflective practice.

• Thesis (dissertation in practice) proposal hearing.

• Thesis (dissertation in practice): The thesis (dissertation in practice) is the culminating component of the Doctor of Education degree in Educational Leadership and Policy that shall include an identification and investigation of a problem of practice, the application of theory and research to the problem of practice, and a design for action to address the problem of practice. Specifically, the thesis (dissertation in practice) consists of original research in the form of a written proposal or plan for innovative and impactful educational policy, guideline, advocacy, development project, or activism within or beyond a traditional educational setting, aimed at improving practice at local, regional, national, or international levels.

• Students are full-time and must maintain continuous registration full-time and pay full-time fees until all degree requirements, including the thesis (dissertation in practice), are completed.

• Students cannot transfer between the EdD and PhD programs.

Program Length

4 years

Time Limit

6 years

LHAE: Educational Leadership and Policy
EdD; Field: International Educational Leadership and Policy

Doctor of Education (Field: International Education Leadership and Policy)

Program Description

Within the Educational Leadership and Policy EdD program, the field in International Education Leadership and Policy offers a robust, world-class program of study structured for professionals working within international settings in positions of leadership and policymaking who want to create impact in their field and mobilize new solutions to real-world problems.

The EdD program is offered full-time in a cohort format and will be delivered in a hybrid modality with short on-campus Institutes. The majority of courses will be offered online. The department welcomes applicants with diverse but relevant backgrounds.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.

• Master’s degree in the area of Educational Leadership and Policy or an equivalent degree with high academic standing from a recognized university.

• In addition to the Statement of Intent, in which applicants will demonstrate experience and interest in studying international issues in education policy and leadership, a supplementary writing sample is required, which will help the admissions committee to assess an applicant’s readiness to succeed in rigorous coursework and to conduct systematic research for the EdD. Applicants typically submit a master’s-level Major Research Paper or thesis as their writing sample. Applicants who do not have a Major Research Paper or thesis must provide a writing sample that showcases their ability to write clearly and analytically about educational issues. Examples include a master’s-level course paper, a policy document, and a professional publication.

• The applicant must be in a leadership position in education in an international setting, or must have held a leadership position, or must demonstrate the relevance of the program to their position or professional development in international education policy.

Program Requirements

• Coursework. Students must complete 4.0 core full-course equivalents (FCEs) as follows:
  o LHA3003H Designing Research Proposals in Educational Leadership and Policy (0.5 FCE; Credit/No Credit)
LHA3005H Introduction to Research Methods for the EdD (RM) (0.5 FCE)
LHA3006H Data Analysis for the Education Doctorate-RM (0.5 FCE)
LHA3007H Literature Reviews for the EdD Program (0.5 FCE)
LHA3040H People and Power in Organizations (0.5 FCE)
LHA3041H Doctoral Seminar on Policy Issues in Education (0.5 FCE)
0.5 elective FCE chosen from 1000, 3000, or 6000-level courses as available online or
- individual reading course (LHA3052H) or
- practicum course (CIE1002H) (0.5 FCE)
LHA3008H Professional Seminar and Dissertation Workshop in International Educational Leadership and Policy (0.5 FCE)
Courses will be offered in specialized sections for the International Educational Leadership and Policy field cohort with course syllabi adapted to reflect the international educational policy focus.
Attendance in an on-campus Institute will be required to allow face-to-face delivery of one course in each of Years 1, 2, and 3. The Institute will foster cohort engagement and exchange; orientation to the OISE professors, the University of Toronto, and the program.
All other courses will be offered online using synchronous and asynchronous modalities.
- Comprehensive examination. Successful oral defence of a portfolio that emphasizes reflective practice will be held using video-conferencing.
- Thesis (dissertation in practice): The thesis (dissertation in practice) is the culminating component of the Doctor of Education degree in International Educational Leadership and Policy that shall include an identification and investigation of a problem of practice, the application of theory and research to the problem of practice, and a design for action to address the problem of practice. Specifically, the thesis (dissertation in practice) consists of original research in the form of a written proposal or plan for innovative and impactful educational policy, guideline, advocacy, development project, or activism within or beyond a traditional educational setting, aimed at improving practice at local, regional, national, or international levels.
- Students are full-time and must maintain continuous registration full-time and pay full-time fees until all degree requirements, including the thesis (dissertation in practice), are completed.
- Students cannot transfer between the EdD and PhD programs.

Program Length

4 years

Time Limit

6 years

LHAE: Educational Leadership and Policy PhD

Doctor of Philosophy

The PhD program in Educational Leadership and Policy fosters the study of problems in the administration and leadership of educational programs. It best serves students who are committed to scholarship and research as a means for deepening their understanding of leadership in schools or in other educational and service institutions.

The program offers both full-time and flexible-time options. While experience in teaching and leadership is not an essential prerequisite for admission, such experience provides a desirable background. The department welcomes applicants with diverse but relevant backgrounds.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.
- An appropriate master's degree, from a recognized university in a relevant discipline or professional program, with a minimum standing equivalent to a University of Toronto A–.
- In addition to the Statement of Intent, a supplementary writing sample is required, which will help the admissions committee to assess an applicant's readiness to succeed in rigorous coursework and to conduct systematic research for the PhD. Applicants typically submit a master's-level Major Research Paper or thesis as their writing sample. Applicants who do not have a Major Research Paper or thesis must provide a writing sample that showcases their ability to write clearly and analytically about educational issues. The admissions committee will look for evidence that applicants understand how to, or have the potential to, craft an academic document, display an ability to define a research problem, devise an appropriate focus for an inquiry, assemble and analyze evidence, and develop conclusions in a rigorous manner. Examples include a master's-level course paper, a policy document, and a professional publication.

Program Requirements

- Coursework. Students must complete a minimum of 3.0 full-course equivalents (FCEs) as follows:
  - LHA3040H People and Power in Organizations (0.5 FCE).
1.0 FCE in research methods, to be chosen in consultation with the faculty advisor (excluding LHA1003H and LHA1004H, which may not be counted towards this requirement). Students who have already attained an acceptable level of competence in research methodology may be authorized to choose a course in a different area of study.

- At least 0.5 FCE at the 3000 level or the 6000 Special Topics level from the Educational Leadership and Policy program.

- **Comprehensive examination.** Successful oral defence of a written portfolio that emphasizes reflective practice.

- **Thesis proposal hearing.**

- **Thesis.**

  - Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
  - Students cannot transfer between the full-time and flexible-time PhD options.
  - Students cannot transfer between the EdD and PhD programs.

**Program Requirements**

- **Coursework.** Students must complete a minimum of 3.0 full-course equivalents (FCEs) as follows:
  - LHA3040H People and Power in Organizations (0.5 FCE).
  - 1.0 FCE in research methods, to be chosen in consultation with the faculty advisor (excluding LHA1003H and LHA1004H, which may not be counted towards this requirement). Students who have already attained an acceptable level of competence in research methodology may be authorized to choose a course in a different area of study.
  - At least 0.5 FCE at the 3000 level or the 6000 Special Topics level from the Educational Leadership and Policy program.

- **Comprehensive examination.** Successful oral defence of a written portfolio that emphasizes reflective practice.

- **Thesis proposal hearing.**

- **Thesis.**

  - Students must register continuously until all degree requirements have been fulfilled. They register full-time during the first four years and may continue as part-time thereafter, with their department's approval.
  - Students cannot transfer between the full-time and flexible-time PhD options.
  - Students cannot transfer between the EdD and PhD programs.

**PhD Program (Flexible-Time)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education's additional admission requirements stated below.

- An appropriate master's degree, from a recognized university in a relevant discipline or professional program, with a minimum standing equivalent to a University of Toronto A–.

- In addition to the Statement of Intent, a supplementary writing sample is required, which will help the admissions committee to assess an applicant's readiness to succeed in rigorous coursework and to conduct systematic research for the PhD. Applicants typically submit a master's-level Major Research Paper or thesis as their writing sample. Applicants who do not have a Major Research Paper or thesis must provide a writing sample that showcases their ability to write clearly and analytically about educational issues. The admissions committee will look for evidence that applicants understand how to, or have the potential to, craft an academic document, display an ability to define a research problem, devise an appropriate focus for an inquiry, assemble and analyze evidence, and develop conclusions in a rigorous manner. Examples include a master's-level course paper, a policy document, and a professional publication.

- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities related to their proposed program of study. Capacity to secure blocks of time to enable concentrated study is required.

**Program Length**

- 6 years

**Time Limit**

- 6 years

**LHAE: Educational Leadership and Policy MA, MEd, EdD, PhD Courses**

Not all courses are offered every year. Please consult the course schedule posted on OISE's Office of the Registrar and Student Services' website.

Some sections of existing courses are offered off campus and online in order to make them available to students in localities far from Toronto.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EDP3045H</td>
<td>Educational Policy and Program Evaluation</td>
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<tr>
<td>EDP3145H</td>
<td>Advanced Issues in Educational Policy Analysis and Program Evaluation</td>
</tr>
<tr>
<td>JOI3043H</td>
<td>Development and Use of Surveys in Education Research (RM)</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
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<tr>
<td>LHA1003H</td>
<td>Designing Master's Research Proposals</td>
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<td>LHA1004H</td>
<td>Research Literacy in Educational Leadership and Policy</td>
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<td>LHA1012H</td>
<td>Organizational Culture and Decision Making</td>
</tr>
<tr>
<td>LHA1016H</td>
<td>School Program Development and Implementation</td>
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<td>LHA1018H</td>
<td>Political Skill in the Education Arena</td>
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<tr>
<td>LHA1019H</td>
<td>Diversity and the Ethics of Educational Leadership and Policy</td>
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<tr>
<td>LHA1020H</td>
<td>Teachers and Educational Change</td>
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<tr>
<td>LHA1029H</td>
<td>Special Applications of the Administrative Process</td>
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<tr>
<td>LHA1030H</td>
<td>The Legal Context of Education</td>
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<tr>
<td>LHA1035H</td>
<td>Sociology of Education</td>
</tr>
<tr>
<td>LHA1040H</td>
<td>Introduction to Educational Leadership and Policy: Policy, Leadership, Change, and Diversity</td>
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<tr>
<td>LHA1041H</td>
<td>Educational Administration II: Social and Policy Contexts of Schooling</td>
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<tr>
<td>LHA1042H</td>
<td>Educational Leadership and Diversity</td>
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<tr>
<td>LHA1047H</td>
<td>Managing Changes in Classroom Practice</td>
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<td>LHA1048H</td>
<td>Educational Leadership and School Improvement</td>
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<td>LHA1050H</td>
<td>Themes and Issues in Policy, Leadership, Change, and Social Diversity</td>
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<td>LHA1052H</td>
<td>Individual Reading and Research in Educational Leadership and Policy: Master's Level</td>
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<tr>
<td>LHA1060H</td>
<td>School Leadership Seminar 1</td>
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<tr>
<td>LHA1061H</td>
<td>School Leadership Seminar 2</td>
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<tr>
<td>LHA1065H</td>
<td>Educational Equity and Excellence in International Comparison</td>
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<tr>
<td>LHA1066H</td>
<td>Comparative and International Perspectives on Gender and Education Policy and Practice (exclusion: CIE6000H)</td>
</tr>
<tr>
<td>LHA2001Y</td>
<td>Major Research Paper</td>
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<tr>
<td>LHA3003H</td>
<td>Designing Research Proposals in Educational Leadership and Policy (Credit/No Credit)</td>
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<tr>
<td>LHA3004H</td>
<td>Research Literacy for the EdD Program</td>
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<tr>
<td>LHA3005H</td>
<td>Introduction to Research Methods for the EdD (RM) (prerequisite: LHA3004H; applies to regular ELP EdD students only)</td>
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<tr>
<td>LHA3006H</td>
<td>Data Analysis for the Education Doctorate-RM (prerequisite: LHA3005H)</td>
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<tr>
<td>LHA3007H</td>
<td>Literature Reviews for the EdD Program (prerequisite: LHA3004H)</td>
</tr>
<tr>
<td>LHA3008H</td>
<td>Professional Seminar and Dissertation Workshop in International Educational Leadership and Policy</td>
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<tr>
<td>LHA3030H</td>
<td>Advanced Legal Issues in Education</td>
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<tr>
<td>LHA3040H</td>
<td>People and Power in Organizations</td>
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<tr>
<td>LHA3041H</td>
<td>Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education</td>
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<tr>
<td>LHA3042H</td>
<td>Field Research in Educational Leadership and Policy (RM)</td>
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<tr>
<td>LHA3044H</td>
<td>Internship/Practicum in Educational Leadership and Policy</td>
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<tr>
<td>LHA3047H</td>
<td>Research Seminar on Leadership and Educational Change</td>
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<tr>
<td>LHA3052H</td>
<td>Individual Reading and Research in Educational Leadership and Policy: Doctoral Level</td>
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<tr>
<td>LHA3055H</td>
<td>Democratic Values, Student Engagement, and Democratic Leadership</td>
</tr>
<tr>
<td>LHA3064H</td>
<td>Global Governance and Educational Change: the Politics of International Cooperation in Education (Prerequisite: CIE1001H. Exclusion: LHA3180H.)</td>
</tr>
<tr>
<td>LHA5000H</td>
<td>Special Topics in Educational Leadership and Policy: Master's Level</td>
</tr>
<tr>
<td>LHA6000H</td>
<td>Special Topics in Educational Leadership and Policy: Doctoral Level</td>
</tr>
</tbody>
</table>

0 Course that may continue over a program. The course is graded when completed.

**Interprogram Courses**

The following course is accepted for credit in the Educational Leadership and Policy program and will satisfy that program's requirement. For a description, see the relevant program.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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LHAE: Higher Education MA

Master of Arts

Program Description

The MA in Higher Education is a research-stream program that focuses on higher education as a field of study. It best serves students seeking the knowledge and research skills needed to pursue administrative and policy careers related to higher education. The MA program also prepares students to pursue doctoral studies in higher education and related fields.

The MA is available through both full-time and part-time studies. The department welcomes applicants with diverse but relevant backgrounds.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - LHA3803H Doctoral Seminar: Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 3.0 other FCEs, of which 1.5 FCEs must be from the Higher Education program.

- **Thesis.**

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

LHAE: Higher Education MEd

Master of Education

Program Description

The Master of Education is a course-based, professional degree designed primarily for higher education professionals seeking to advance their understanding of the issues confronting their institution and the postsecondary system. It best serves students seeking research-informed knowledge on how colleges and universities work in order to pursue or advance administrative and policy careers related to higher education.

The program can be pursued on a full-time or part-time basis. Note that the field in Higher Education Leadership is offered part-time only.

The Master of Education is offered in four fields: 1) Education in the Professions; 2) Higher Education; 3) Higher Education Leadership and 4) Student Development and Student Services in Higher Education.

Field: Education in the Professions

The Education in the Professions field is a course-based professional master’s designed for individuals working in areas such as the health professions, law and law enforcement, engineering, and public services, who are planning a career in educational administration, teaching, and leadership. This field introduces the broader area of higher education as well as current issues and research methods in education research in the professions.

Two options are offered: 1) Coursework Only Option; and 2) Coursework Plus Major Research Paper Option. Students initially apply to and register in the Coursework Only Option. For registration in the Coursework Plus Major Research Paper Option, departmental permission is required.

Field: Higher Education

The Higher Education field is focused on the issues confronting higher education institutions and the postsecondary education system. It is intended for students seeking research-informed knowledge on how colleges and universities work in order to pursue and advance their administrative and policy careers in higher education. Students are accepted every year and can register on a full-time or part-time basis.

Field: Higher Education Leadership

The Higher Education Leadership field is specifically designed for professionals working in higher education at entry to mid-levels, who seek to build their careers in higher education. With a focus on leadership skills for both the college and university contexts, the field is aimed to bridge the understanding and collaboration of leaders across both sectors. Students move through the Higher Education field as a cohort and register part-time. Classes are generally offered in a compressed format to suit working professionals. Applicants are accepted to the field every other year.
Field: Student Development and Student Services in Higher Education

The Student Development and Student Services in Higher Education field is designed for student development and student services professionals who are seeking to acquire the knowledge and skills that are evidence- and experientially based to provide leadership in various types of postsecondary institutions.

LHAE: Higher Education MEd; Field: Education in the Professions

Master of Education (Field: Education in the Professions)

Program Description

The Master of Education in Higher Education is a course-based, professional degree designed primarily for higher education professionals seeking to advance their understanding of the issues confronting their institution and the postsecondary system. It best serves students seeking research-informed knowledge on how colleges and universities work in order to pursue or advance administrative and policy careers related to higher education. The program can be pursued on a full-time or part-time basis.

Within the MEd program, the field in Education in the Professions is a course-based professional master's designed for individuals working in areas such as the health professions, law and law enforcement, engineering, and public services, who are planning a career in educational administration, teaching, and leadership. This field introduces the broader area of higher education as well as current issues and research methods in education research in the professions.

Two options are offered: 1) Coursework Only Option; and 2) Coursework Plus Major Research Paper Option. Students initially apply to and register in the Coursework Only Option. For registration in the Coursework Plus Major Research Paper Option, departmental permission is required.

Application Requirements

- Current resumé.
- Transcript(s) from each postsecondary institution attended.
- One academic and one professional reference letter.
- Statement of Intent describing the applicant’s motivation for wishing to take the program, as well as how previous qualifications and professional work experience support their interest in the program and the field.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
  - An appropriate bachelor’s degree from a recognized university with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements (Coursework Only Option)

- Coursework. Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - LHA1803H Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - 1.0 FCE in the Education in the Professions field.
  - 1.0 FCE in the general Higher Education program.
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 2.0 FCEs in electives.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Program Requirements (Coursework Plus Major Research Paper Option)

Students initially apply to and register in the MEd Coursework Only Option. For registration in the Coursework Plus Major Research Paper Option, departmental permission is required.

- Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - LHA1803H Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - 1.0 FCE in the Education in the Professions field.
  - 1.0 FCE in the general Higher Education.
  - 0.5 FCE in research methods.
  - 1.0 FCE in electives.
- Major Research Paper (MRP): LHA2001Y0 Major Research Paper, to be carried out under the guidance of a faculty member.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W); 10 sessions part-time

Time Limit

3 years full-time; 6 years part-time
LHAE: Higher Education MEd; Field: Higher Education

Master of Education (Field: Higher Education)

Program Description

The Master of Education in Higher Education is a course-based, professional degree designed primarily for higher education professionals seeking to advance their understanding of the issues confronting their institution and the postsecondary system. It best serves students seeking research-informed knowledge on how colleges and universities work in order to pursue or advance administrative and policy careers related to higher education. The program can be pursued on a full-time or part-time basis.

Within the MEd program, the field in Higher Education focuses on the issues confronting higher education institutions and the postsecondary education system. It is intended for students seeking research-informed knowledge on how colleges and universities work in order to pursue and advance their administrative and policy careers in higher education. Students are accepted every year and can register on a full-time or part-time basis.

Application Requirements

- Current resumé.
- Transcript(s) from each postsecondary institution attended.
- One academic and one professional reference letter.
- Statement of Intent describing the applicant’s motivation for wishing to take the program, as well as how previous qualifications and professional work experience support their interest in the program and the field.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- **Coursework.** Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - LHA1803H Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - 0.5 FCE in research methods.
  - 4.0 FCEs in electives, of which 1.5 FCEs must be from the Higher Education field.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time

LHAE: Higher Education MEd; Field: Higher Education Leadership

Master of Education (Field: Higher Education Leadership)

Program Description

The Master of Education in Higher Education is a course-based, professional degree designed primarily for higher education professionals seeking to advance their understanding of the issues confronting their institution and the postsecondary system. It best serves students seeking research-informed knowledge on how colleges and universities work in order to pursue or advance administrative and policy careers related to higher education.

Within the MEd program, the field in Higher Education Leadership is specifically designed for professionals working in higher education at entry to mid-levels, who seek to build their careers in higher education. With a focus on leadership skills for both the college and university contexts, the field is aimed to bridge the understanding and collaboration of leaders across both sectors. Students move through the Higher Education field as a cohort and register part-time. Classes are generally offered in a compressed format to suit working professionals.

Applicants are accepted every other year. This field is offered part-time only.

Application Requirements

- Current resumé.
- Transcript(s) from each postsecondary institution attended.
- One academic and one professional reference letter.
- Statement of Intent describing the applicant’s motivation for wishing to take the program, as well as how previous qualifications and professional work experience support their interest in the program and the field.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- **Coursework.** Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - LHA1803H Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - 0.5 FCE in research methods.
  - 4.0 FCEs in electives, of which 1.5 FCEs must be from the Higher Education field.
Application Requirements

- Current resumé.
- Transcript(s) from each postsecondary institution attended.
- One academic and one professional reference letter.
- Statement of Intent describing the applicant’s motivation for wishing to take the program, as well as how previous qualifications and professional work experience support their interest in the program and the field.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with a grade equivalent to a University of Toronto mid-B or better in the final year.

Program Requirements

- Coursework. Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - LHA1803H Recurring Issues in Postsecondary Education (0.5 FCE), to be taken at the beginning of the program.
  - LHA1811H Organizational Change in Higher Education.
  - LHA1815H Economics and Finance of Higher Education.
  - LHA1836H Critical Analysis of Research in Higher Education.
  - LHA1847H Human Resource and Diversity Issues in Higher Education.
  - LHA1854H Student Development Theory.
  - LHA1860H Capstone Project for Higher Education Leadership Cohort Option.
  - 1.5 FCEs in elective courses.

Program Length

10 sessions part-time

Time Limit

6 years part-time

LHAE: Higher Education MEd; Field: Student Development and Student Services in Higher Education

Master of Education (Field: Student Development and Student Services in Higher Education)

Program Description

The Master of Education in Higher Education is a course-based, professional degree designed primarily for higher education professionals seeking to advance their understanding of the issues confronting their institution and the postsecondary system. It best serves students seeking research-informed knowledge on how colleges and universities work in order to pursue or advance administrative and policy careers related to higher education. The program can be pursued on a full-time or part-time basis.

Within the MEd program, the field in Student Development and Student Services in Higher Education is designed for student development and student services professionals who are seeking to acquire the knowledge and skills that are evidence- and experientially based to provide leadership in various types of postsecondary institutions.
**LHAE: Higher Education EdD**

**Doctor of Education**

**Program Description**

The EdD Program in Higher Education is intended to shape highly competent professionals in leadership positions in higher education administration or policy. It best serves students seeking the knowledge and research skills needed to pursue research-grounded professional careers in colleges, universities, government agencies, professional associations, and international organizations.

The EdD program can be pursued either on a part-time or full-time basis. The department welcomes applicants with diverse but relevant backgrounds.

Students cannot transfer between the EdD and PhD programs.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- Relevant and acceptable MEd or MA. In individual cases, students with a highly relevant master’s degree or other equivalent graduate degree may be admitted, but additional courses in Higher Education will be required.

**Program Requirements**

- **Coursework.** Students must complete a minimum of 4.0 full-course equivalents (FCEs) as follows:
  - LHA1803H *Recurring Issues in Postsecondary Education* (0.5 FCE).
  - At least 1.0 other FCE in Higher Education.
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 1.0 FCE selected either in Higher Education or in another graduate program at OISE or, with the approval of the faculty advisor, in another graduate department at the University of Toronto.
  - Supervised applied research practicum (0.5 FCE).
  - Collaborative proseminar (0.5 FCE).
- **Comprehensive examination.** The objective of the doctoral comprehensive examination is to ensure that all students master at least one substantive research area in Higher Education and have the capacity to develop their own written analysis of selected issues within this area. The examination is designed to ensure that students are familiar with the literature and concepts associated with their special area of study within the field of Higher Education.
- **Thesis** reporting the results of original research on an applied topic in postsecondary education.
- Students may begin their EdD degree on a full-time or a part-time basis but must maintain continuous registration. They must register full-time for a minimum of two consecutive sessions, not including Summer, of on-campus study. Once enrolled full-time, students must maintain continuous registration full-time and pay full-time fees until all degree requirements, including the thesis, are completed.

**Program Length**

4 years full-time; 6 years part-time

**Time Limit**

6 years full-time; 6 years part-time

**LHAE: Higher Education PhD**

**Doctor of Philosophy**

**Program Description**

The PhD Program in Higher Education fosters research-grounded study of higher education administration and policy. It best serves students seeking the knowledge and research skills needed to pursue careers in colleges, universities, government agencies, professional associations, and international organizations as a higher education expert. The program offers both full-time and flexible-time options.

The Doctor of Philosophy is available in two delivery models:

- **Regular PhD stream:** students are accepted every year into the full-time or flexible-time program.
- **The Community College Leadership (CCL) Cohort:** available in select years. The CCL Cohort is designed for emerging college leaders and focuses specifically on the college system. The CCL is mostly offered in compressed mode, mainly on weekends, to suit working professionals pursuing a flexible-time program. Applicants must specify their interest in the CCL Cohort in their Statement of Intent.

The department welcomes applicants with diverse but relevant backgrounds.

**PhD Program (Full-Time Option)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.
- Relevant and acceptable MEd or MA. In individual cases, students with a highly relevant master’s degree or other equivalent graduate degree may be admitted, but additional courses in Higher Education may be required.
Program Requirements

- **Coursework.** Students must complete a minimum 3.0 full-course equivalents (FCEs) as follows:
  - LHA3803H *Doctoral Seminar: Recurring Issues in Postsecondary Education* (0.5 FCE), to be taken at the beginning of the program.
  - LHA3804H *Doctoral Research Seminar in Postsecondary Education* (0.5 FCE), to be taken at the beginning of the program.
  - At least 1.0 other FCE in Higher Education.
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 0.5 FCE selected either in Higher Education or in another graduate program at OISE, or, with the approval of the faculty advisor, in another graduate department at the University of Toronto.

- **Comprehensive examination.** The objective of the doctoral comprehensive examination is to ensure that all students master at least one substantive research area in Higher Education and have the capacity to develop their own written analysis of selected issues within this area. The examination is designed to ensure that students are familiar with the literature and concepts associated with their special area of study within the field of Higher Education.

- **Thesis.** Reporting the results of original research in postsecondary education.

- Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.

- Students cannot transfer between the full-time and flexible-time PhD options.

- Students cannot transfer between the EdD and PhD programs.

Program Length

4 years

Time Limit

6 years

PhD Program (Flexible-Time Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Leadership, Higher and Adult Education’s additional admission requirements stated below.

- Relevant and acceptable MEd or MA. In individual cases, students with a highly relevant master’s degree or other equivalent graduate degree may be admitted, but additional courses in Higher Education may be required.

- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities related to their proposed program of study. Applicants should have capacity to secure blocks of time to enable concentrated study.

Program Requirements

- **Coursework.** Students must complete a minimum 3.0 full-course equivalents (FCEs) as follows:
  - LHA3803H *Doctoral Seminar: Recurring Issues in Postsecondary Education* (0.5 FCE), to be taken at the beginning of the program.
  - LHA3804H *Doctoral Research Seminar in Postsecondary Education* (0.5 FCE), to be taken at the beginning of the program.
  - At least 1.0 other FCE in Higher Education.
  - 0.5 FCE in research methods approved by the faculty advisor.
  - 0.5 FCE selected either in Higher Education or in another graduate program at OISE, or, with the approval of the faculty advisor, in another graduate department at the University of Toronto.

- **Comprehensive examination.** The objective of the doctoral comprehensive examination is to ensure that all students master at least one substantive research area in Higher Education and have the capacity to develop their own written analysis of selected issues within this area. The examination is designed to ensure that students are familiar with the literature and concepts associated with their special area of study within the field of Higher Education.

- **Thesis.** Reporting the results of original research in postsecondary education.

- Students must register continuously until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department’s approval.

- Students cannot transfer between the full-time and flexible-time PhD options.

- Students cannot transfer between the EdD and PhD programs.

Program Length

6 years

Time Limit

6 years

LHAE: Higher Education MA, MEd, EdD, PhD Courses

Not all courses are offered every year. Please consult the course schedule posted on OISE’s Office of the Registrar and Student Services’ website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHA1802Y</td>
<td>Theory in Higher Education</td>
</tr>
<tr>
<td>LHA1803H</td>
<td>Recurring Issues in Postsecondary Education</td>
</tr>
<tr>
<td>LHA1804H</td>
<td>Issues in Medical/Health Professional Education</td>
</tr>
<tr>
<td>LHA1805H</td>
<td>The College Sector</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>LHA1806H</td>
<td>Systems of Higher Education</td>
</tr>
<tr>
<td>LHA1807H</td>
<td>System-Wide Planning and Policy for Higher Education</td>
</tr>
<tr>
<td>LHA1808H</td>
<td>Research in Health Professional Education (RM)</td>
</tr>
<tr>
<td>LHA1809H</td>
<td>Administration of Colleges and Universities</td>
</tr>
<tr>
<td>LHA1810H</td>
<td>Evaluation of Knowledge, Clinical Competence, and Professional Behaviour in the Health Professions</td>
</tr>
<tr>
<td>LHA1811H</td>
<td>Organizational Change in Higher Education</td>
</tr>
<tr>
<td>LHA1812H</td>
<td>Education and the Professions</td>
</tr>
<tr>
<td>LHA1813H</td>
<td>Issues in Cognitive and Educational Psychology: Implications for Health Professional Education</td>
</tr>
<tr>
<td>LHA1814H</td>
<td>Lifelong Learning and Professional and Vocational Education (Exclusion: LHA5807H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA1816H</td>
<td>Sociology of Higher Education (Exclusion: LHA5807H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA1818H</td>
<td>Politics of Higher Education (Exclusion: LHA5806H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA1822H</td>
<td>Teaching and Learning in Higher Education (Exclusion: LHA5809H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA1823H</td>
<td>Scholarship of Teaching and Learning in the Professions (Exclusion: LHA5814H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA1825H</td>
<td>Comparative Education Theory and Methodology (RM)</td>
</tr>
<tr>
<td>LHA1826H</td>
<td>Comparative Higher Education</td>
</tr>
<tr>
<td>LHA1828H</td>
<td>Evaluation in Higher Education (RM)</td>
</tr>
<tr>
<td>LHA1834H</td>
<td>Qualitative Research in Higher Education (RM)</td>
</tr>
<tr>
<td>LHA1835H</td>
<td>Logics and Strategies of Case Study Research (RM)</td>
</tr>
<tr>
<td>LHA1836H</td>
<td>Critical Analysis of Research in Higher Education (RM)</td>
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<tr>
<td>LHA1837H</td>
<td>Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing</td>
</tr>
<tr>
<td>LHA1843H</td>
<td>Higher Education and the Law</td>
</tr>
<tr>
<td>LHA1844H</td>
<td>The Student Experience in Postsecondary Education</td>
</tr>
<tr>
<td>LHA1846H</td>
<td>Internationalization of Higher Education in a Comparative Perspective</td>
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<th>Course Code</th>
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<tbody>
<tr>
<td>LHA1847H</td>
<td>Human Resource and Diversity Issues in Higher Education</td>
</tr>
<tr>
<td>LHA1848H</td>
<td>Innovative Curricula in Higher Education and the Professions</td>
</tr>
<tr>
<td>LHA1849H</td>
<td>Faculty in Colleges and Universities</td>
</tr>
<tr>
<td>LHA1852H</td>
<td>Individual Reading and Research in Higher Education: Master’s Level</td>
</tr>
<tr>
<td>LHA1853H</td>
<td>Introduction to Student Services</td>
</tr>
<tr>
<td>LHA1854H</td>
<td>Student Development Theory</td>
</tr>
<tr>
<td>LHA1855H</td>
<td>Capstone in Student Development and Student Services</td>
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<tr>
<td>LHA1856H</td>
<td>Advanced Student Development Theories in Higher Education</td>
</tr>
<tr>
<td>LHA1857H</td>
<td>Leadership in Student Affairs and Services</td>
</tr>
<tr>
<td>LHA1860H</td>
<td>Capstone Project for Higher Education Leadership Cohort Option (Exclusion: LHA5805H Special Topics in Higher Education: Master's Level.)</td>
</tr>
<tr>
<td>LHA3803H</td>
<td>Doctoral Seminar: Recurring Issues in Postsecondary Education</td>
</tr>
<tr>
<td>LHA3804H</td>
<td>Doctoral Research Seminar in Higher Education</td>
</tr>
<tr>
<td>LHA3810H</td>
<td>International Academic Relations</td>
</tr>
<tr>
<td>LHA3852H</td>
<td>Individual Reading and Research in Higher Education: Doctoral Level</td>
</tr>
<tr>
<td>LHA5800H</td>
<td>Special Topics in Higher Education: Master's Level</td>
</tr>
<tr>
<td>LHA6800H</td>
<td>Special Topics in Higher Education: Doctoral Level</td>
</tr>
</tbody>
</table>

**Interprogram Course**

The following course is accepted for credit in the Higher Education program and will satisfy that program’s requirement. For a description, see the relevant program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SJE2941H</td>
<td>Bourdieu: Theory of Practice in Social Sciences <a href="#">Leadership, Higher and Adult Education</a></td>
</tr>
</tbody>
</table>
Linguistics

Linguistics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Linguistics

MA and PhD

- Fields:
  - Language Variation;
  - Psycholinguistics;
  - Theoretical Linguistics

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Jewish Studies
  - Linguistics, PhD
- Sexual Diversity Studies
  - Linguistics, MA, PhD

Overview

The discipline of linguistics focuses on the nature of human language and how its many systems can be accounted for. The Department of Linguistics focuses on three major areas — theoretical linguistics, language variation and change, and psycholinguistics — with an emphasis on the intersections between these areas.

The core areas of research and teaching in the MA and PhD are:

- Theoretical Linguistics (generative grammar: phonetics, phonology, morphology, syntax, semantics)
- Language Variation (sociolinguistics, dialectology, language variation, language change)
- Psycholinguistics (comprehension and production, language acquisition, both in relation to linguistic theory)

Contact and Address

Web: www.linguistics.utoronto.ca
Email: linguistics@utoronto.ca
Telephone: (416) 978-4029
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Department of Linguistics
University of Toronto
Sidney Smith Hall
4th Floor, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Linguistics: Graduate Faculty

Full Members

Beekhuizen, Barend - BA, MA, PhD
Bejar, Susana - BA, MA, PhD
Chambers, Craig - BA, MA, MA, PhD
Cuervo, M. Cristina - PhD
Hachimi, Atiqa - BA, MA, PhD
Heller, Daphna - PhD
Ippolito, Michela - BA, MPH, PhD
Jurgec, Peter - BA, PhD, ScD
Kahneumuyipour, Arsalan - PhD (Graduate Coordinator)
Kang, Yoonjung - BA, PhD
Kochetov, Alexei - BA, MA, PhD
Monahan, Philip Joseph - BPhil, MPH, PhD
Nagy, Naomi - BA, PhD
Oliveira de Lima, Suzi - PhD
Perez-Leroux, Ana Teresa - MA, PhD
Rice, Keren - BA, MA, PhD
Roberge, Yves - BA, MA, PhD
Schartz, Jessamyn Leigh - BA, MS, PhD
Tagliamonte, Sali - AB, MA, DPhil (Chair and Graduate Chair)
Thomas, Guillaume - PhD

Members Emeriti

Chambers, J. K. - DipEd, BA, MA, PhD
Cowper, Elizabeth - BA, AM, PhD
Drescher, B. Elan - BA, PhD
Johns, Alana - BA, MA, PhD
Massam, Diane - BA, MA, PhD
Smyth, Ronald - BA, MSc, PhD

Associate Members

Bhatt, Parth - BA, MA, PhD
Brousseau, Anne-Marie - PhD
Chasin, Marshall - BSc, MSc
Colantoni, Laura - MA, PhD
DeCaire, Ryan - MA
Dunbar, Ewan - BS, MA, PhD
Grigoroglou, Myrto - PhD, PhD
Hall, Daniel Currie - BA, MA, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Johnson, Elizabeth - BA, MA, PhD
Kush, Dave W. - BA, PhD
Mateo Pedro, Pedro - PhD
Moulton, Keir - PhD
Nikiema, Emmanuel - PhD
Pirvulescu, Mihaela - MA, PhD
Sanders, Nathan - PhD
Sidnell, Jack - BA, MA, PhD
Steele, Jeffrey - BA, MA, PhD
Troberg, Michelle - BA, BE, MA, PhD
Wastasecoot, Brenda - MEd
Linguistics: Linguistics MA

Master of Arts

Program Description

The MA program in Linguistics offers comprehensive training in three areas of strength: theoretical linguistics, language variation and change, and psycholinguistics. Students complete rigorous coursework with research training in their preferred area of study. By the time of graduation, students are equipped with professional-level skills in interpretation of data, analysis, and argumentation.

The department offers one- and two-year MA options. The majority of students are admitted to the one-year MA option.

MA Program (One-Year Advanced-Standing Option — Standard Admission)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Linguistics' additional admission requirements stated below.
- Applicants with a bachelor's degree, with a minimum B+ average, may be admitted to the one-year program. Admission requires a strong background in linguistics with at least courses in introductory phonetics, phonology, morphology, and syntax.

Program Requirements

- Coursework. Students must normally complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - 1.5 FCEs: JAL1145H, LIN1121H, and LIN1131H or their equivalents, if not already taken.
  - 1.5 FCEs from other Linguistics course offerings determined by the Graduate Coordinator.
  - 1.0 FCE: LIN2100Y Linguistic Forum including regular class meetings in which students discuss and present their research topics and a final paper, completed under the supervision of a faculty member working in the same research area.

MA Program (Two-Year)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Linguistics' additional admission requirements stated below.
- Applicants with a bachelor's degree, with a minimum B+ average, may be admitted to the two-year MA program. Admission is offered to rare instances to exceptional applicants whose background in linguistics is limited.

Program Requirements

- Coursework. Students must normally complete a total of 8.0 full-course equivalents (FCEs) as follows:
  - Year 1: 4.0 FCEs in phonetics, phonology, morphology, and syntax if not completed during the student's undergraduate degree;
  - Year 2: 4.0 FCEs as follows:
    - 2.0 FCEs: JAL1145H, LIN1103H, LIN1121H, LIN1131H, or their equivalents, if not already taken.
    - 1.0 FCE from other Linguistics course offerings as determined by the Graduate Coordinator.
    - 1.0 FCE: LIN2100Y Linguistic Forum including regular class meetings in which students discuss and present their research topics and a final paper, completed under the supervision of a faculty member working in the same research area.

- All students must demonstrate an ability to read professionally in one language other than English. The choice of language must be approved by the Graduate Coordinator, having regard to the student's field of research. In some circumstances, demonstrated competence in computer programming may satisfy the requirement.

Program Length

6 sessions (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
Linguistics: Linguistics PhD

Doctor of Philosophy

Program Description

The PhD program in Linguistics offers comprehensive and rigorous training in an environment that encourages collaboration across the fields of Theoretical Linguistics, Language Variation and Change, and Psycholinguistics. Students achieve an advanced understanding of language and are equipped with professional-level skills in analysis, argumentation, interpretation, and quantitative reasoning. While many graduates choose academic positions, many others choose to pursue careers in fields such as education, publishing, and data science.

Applicants may enter the PhD program via one of two routes: 1) following completion of an MA degree; 2) direct entry following completion of a bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Linguistics’ additional admission requirements stated below.
- University of Toronto MA in Linguistics, or its equivalent, with at least an A– average.

Program Requirements

- **Coursework.** By the end of Year 2, students must successfully complete a total of 5.5 full-course equivalents (FCEs) with a minimum median grade of A–:
  - 3.0 FCEs or their equivalents must be completed if they have not been taken previously: JAL1145H, LIN1103H, LIN1104H, LIN1121H, LIN1131H, LIN1145H.
    - If these have been previously taken, a balance of electives must be taken to fulfill the 3.0 FCE requirement, chosen in consultation with the Graduate Coordinator.
  - 0.5 FCE from JLP2451H, JLP2452H, LIN1070H, LIN1106H, LIN1107H, LIN1121H, LIN1156H, LIN1211H, LIN1255H, LIN1256H, LIN1271H, LIN1272H, LIN1276H.
  - 0.5 elective FCE, which may be taken outside the Department of Linguistics, upon consultation with the Graduate Coordinator.
  - Of the above courses, 1.0 FCE must be taken at the 1200 level, with 0.5 FCE in Phonology, Syntax, or Semantics.
  - 0.5 FCE: LIN2101H Junior Forum (Credit/No Credit), taken in Year 1.
  - 1.0 FCE: LIN2201H Generals Paper I and LIN2202H Generals Paper II — completion in two areas of study (at least one of which must be in an area of linguistic theory). Topics must be approved by the Graduate Coordinator.
- **Residency.** During Years 1 and 2, students are normally required to be on campus full-time; i.e., in such geographical proximity as to be able to visit the campus regularly and to participate fully in the department’s activities associated with the program.
- **Language.** Students must demonstrate an ability to read professionally in one language other than English. The choice of language must be approved by the Graduate Coordinator, having regard to the student’s field of research. In some circumstances, demonstrated competence in computer programming may satisfy the requirement.
- **Thesis.** Candidates are required to present a thesis, which must be an original contribution to linguistic knowledge. Both the preparation for and the writing of the thesis will be carried out under the supervision of members of the department.

Program Length

4 years full-time

Time Limit

6 years full-time

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Linguistics’ additional admission requirements stated below.
- Applicants with a bachelor’s degree, with a minimum A– average, may be admitted to the direct-entry PhD option. Admission requires a strong background in linguistics with courses in introductory phonetics, phonology, morphology, syntax, and a demonstration of capacity for original research.

Program Requirements

- **Coursework.** By the end of Year 3, students must successfully complete a total of 7.5 full-course equivalents (FCEs) with a minimum median grade of A–:
  - 3.0 FCEs or their equivalents must be completed if they have not been taken previously: JAL1145H, LIN1103H, LIN1104H, LIN1121H, LIN1131H, LIN1145H.
    - If these have been previously taken, a balance of electives must be taken to fulfill the 3.0 FCE requirement, chosen in consultation with the Graduate Coordinator.
  - 0.5 FCE from JLP2451H, JLP2452H, LIN1070H, LIN1106H, LIN1107H, LIN1121H, LIN1156H, LIN1211H, LIN1255H, LIN1256H, LIN1271H, LIN1272H, LIN1276H.
  - 0.5 elective FCE, which may be taken outside the Department of Linguistics, upon consultation with the Graduate Coordinator.
  - Of the above courses, 1.0 FCE must be taken at the 1200 level, with 0.5 FCE in Phonology, Syntax, or Semantics.
  - 0.5 FCE: LIN2101H Junior Forum (Credit/No Credit), taken in Year 1.
  - 1.0 FCE: LIN2201H Generals Paper I and LIN2202H Generals Paper II — completion in two areas of study (at least one of which must be in an area of linguistic theory).
2.5 elective FCEs; of these, 0.5 FCE may be taken outside the Department of Linguistics, upon consultation with the Graduate Coordinator.

Of the above courses, 1.0 FCE must be taken at the 1200 level, with 0.5 FCE in Phonology, Syntax, or Semantics.

0.5 FCE: LIN2101H Junior Forum (Credit/No Credit), taken in Year 1.

1.0 FCE: LIN2201H Generals Paper I and LIN2202H Generals Paper II — completion in two areas of study (at least one of which must be in an area of linguistic theory). Topics must be approved by the Graduate Coordinator.

**Residency.** During Years 1, 2, and 3, students are normally required to be on campus full-time; i.e., in such geographical proximity as to be able to visit the campus regularly and to participate fully in the department’s activities associated with the program.

**Language.** Students must demonstrate an ability to read professionally in one language other than English. The choice of language must be approved by the Graduate Coordinator, having regard to the student's field of research. In some circumstances, demonstrated competence in computer programming may satisfy the requirement.

**Thesis.** Candidates are required to present a thesis, which must be an original contribution to linguistic knowledge. Both the preparation for and the writing of the thesis will be carried out under the supervision of members of the department.

### Program Length

5 years full-time

### Time Limit

7 years full-time

### Linguistics: Linguistics MA, PhD Courses

Course descriptions and other information are available each spring from the Coordinator of Graduate Studies. Not all courses are offered in a given year. Students should consult the [departmental website](#).

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>JAL1145H</td>
<td>Field Methods</td>
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<tr>
<td>JAL1155H</td>
<td>Language and Gender</td>
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<tr>
<td>JLP2451H</td>
<td>Language Acquisition</td>
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<tr>
<td>JLP2452H</td>
<td>Language Acquisition and Linguistic Theory</td>
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<tr>
<td>LIN1001H</td>
<td>Introduction to Linguistics: Sound Structure</td>
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<td>LIN1002H</td>
<td>Introduction to Linguistics: Sentence Structure and Meaning</td>
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<td>LIN1029H</td>
<td>Sound Patterns in Language</td>
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<td>Introduction to Analysis and Argumentation</td>
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<td>LIN1104H</td>
<td>Quantitative Methods in Linguistics (Credit/No Credit)</td>
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<td>LIN1105H</td>
<td>Advanced Quantitative Methods in Linguistics (prerequisite: LIN1104H)</td>
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<td>LIN1107H</td>
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<td>LIN1133H</td>
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<tr>
<td>LIN1145H</td>
<td>Semantics</td>
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<td>LIN1146H</td>
<td>Topics in Semantics and Pragmatics (prerequisite: LIN1145H)</td>
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<tr>
<td>LIN1151H</td>
<td>Urban Dialectology</td>
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<tr>
<td>LIN1156H</td>
<td>Language Variation and Change: Theory and Analysis</td>
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<tr>
<td>LIN1162H</td>
<td>Comparative-Historical Linguistics I</td>
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<tr>
<td>LIN1211H</td>
<td>Advanced Phonetics (prerequisite: LIN228H, LIN323H, or permission of the instructor)</td>
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<td>LIN1256H</td>
<td>Advanced Language Variation and Change II</td>
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<td>Research Seminar</td>
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<td>Junior Forum (Credit/No Credit)</td>
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<td>Generals Paper I</td>
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<tr>
<td>LIN2202H</td>
<td>Generals Paper II</td>
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</table>
Management, Rotman School of Management

Management, Rotman School: Introduction

Faculty Affiliation

Management, Rotman School of Management

Degree Programs

Management

MBA

- Full-Time Master of Business Administration;
- Extended Full-Time Master of Business Administration (Morning/Evening);
- Executive Master of Business Administration
  - Global Executive Master of Business Administration (GEMBA): the GEMBA is a field that is only offered as part of the dual degree
  - Dual Degree Program: Global Executive Master of Business Administration (University of Toronto) / Global Executive Master of Business Administration (Università Commerciale Luigi Bocconi)
  - Global Executive Master of Business Administration for Healthcare and the Life Sciences (GEMBA-HLS)

Finance

MF

Financial Risk Management

MFRM

Management Analytics

MMA

Combined Degree Programs

- STG, Engineering, BASc / Management, MBA
- STG, Law, Juris Doctor / Management, MBA
- STG, Management, MBA / MGA
- STG, Medicine, Doctor of / Management, Full-Time Option, MBA
- STG, Pharmacy, Doctor of / Management, MBA

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Contemporary East and Southeast Asian Studies
  - Management, MBA
- Environmental Studies
  - Management, MBA

Diploma Programs

Professional Accounting

GDipPA

Overview

The Rotman School of Management is a catalyst for transformative learning, insights, and public engagement, bringing together diverse views and initiatives around a defining purpose: to create value for business and society.

The School is located in Canada’s financial, commercial, and cultural capital, and students are trained just blocks from Bay Street, Canada’s business centre. The School takes full advantage of its strategic location by drawing on a rich pool of business leaders as teachers, mentors, and speakers. The School’s strong academic reputation and close ties to the business community give graduates an edge in their search for a fulfilling career.

In the classroom, top-ranked faculty provide access to the latest research before it filters into consulting firms and major corporations. Learning at Rotman goes deep — combining a rigorous, model-based approach to decision making with a strong emphasis on personal development. The School attracts people from a wide range of countries and backgrounds, and provides them with a learning environment that is safe, welcoming, open, inclusive, and respectful to all.

Contact and Address

Rotman School of Management

Web
Telephone

MBA: (416) 978-3499
Morning/Evening MBA: (416) 946-5916
Executive MBA: (416) 946-3022
Global Executive MBA: (416) 946-3022
Global Executive MBA for Healthcare and the Life Sciences: (416) 946-3638
Master of Finance: (416) 946-5916
Master of Financial Risk Management: (416) 978-2230
Master of Management Analytics: (416) 946-3638
Graduate Diploma in Professional Accounting: (416) 978-2230

Address

Rotman School of Management
University of Toronto
105 St. George Street
Toronto, Ontario M5S 3E6
Canada

Management, Rotman School of Management

Management, Rotman School of: Graduate Faculty

Full Members

Afeche, Philipp - BA, MS, PhD
Agrawal, Ajay - BASc, MEng, MBA, PhD
Amernic, Joel - BSc, MBA, CA
Anastakis, Dimitry - PhD
Bar-Isaac, Heski - BA, MSc, PhD
Baron, Opher - BSc, MBA, PhD (Academic Director, Master of Management Analytics Program)
Baum-Snow, Nathaniel - AB, PhD
Baum, Joel - BA, MBA, PhD
Berman, Oded - BA, PhD
Blum, Bernardo - BA, MA, MA, PhD
Booth, Laurence - BSc, MBA, MA, DBA
Bova, Francesco - BComm, MPH, MBA, MA, PhD
Bowers, Anne - BA, MBA, PhD
Callen, Jeffrey - BM, MBA, DPhil
Casciaro, Tiziana - BA, MS, PhD
Christianson, Marlys - MD, PhD
Christoffersen, Susan - BA, MA, PhD (Dean)
Corts, Kenneth - BA, MA, PhD (Vice-Dean, Research, Strategy, and Resources)
Côté, Stéphane - BSc, MA, PhD
Cunningham, William - BA, MPH, MS, MA, PhD
Dart, Beatrix - MIST, MEC, PhD (Academic Director, Experiential and Global Learning)
Davydenko, Sergei - MA, MSc, PhD (Academic Director, Master of Finance Program)
DeCelles, Katherine - BS, PhD (Academic Director, PhD Program)
Dhuey, Elizabeth Ann - BA, MEd, PhD
Doidge, Craig Andrew - BComm, MSc, PhD (Vice-Dean, Faculty)
Dyk, Alexander - BA, PhD
Edwards, Alexander - BAC, MS, MA, PhD (Academic Director, Rotman Commerce Program)
Elitzur, Ramy - BA, MBA, PHM, PhD
Elkamhi, Redouane - BE, MBA, PhD
Feinberg, Matthew - BA, MEd, PhD
Florida, Richard - BA, PhD
Galasso, Alberto - PhD
Gans, Joshua - BSc, PhD
Golden, Brian - BS, MS, PhD (Academic Director, Global Executive MBA and Co-Academic Director, Global Executive MBA for Healthcare and the Life Sciences Programs)
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BS, MS, MS, PhD
Gomez, Rafael - BA, MA, MIR, PhD
Hadfield, Gillian - BA, JD, PhD, Schwartz/Reisman Chair
Han, Bing - PhD
Han, Lu - BA, MA, PhD
Hawkins, Scott - BA, MS, PhD
Hejazi, Walid - BA, MA, PhD
Hoffman, Mitchell - BA, PhD
Hope, Ole-Kristian - MBA, PhD
Hu, Ming - BS, MS, PhD
Hull, John - BA, MA, MA, PhD
Hyatt, Douglas - BA, MA, PhD
Kan, Raymond - BBA, MBA, DPhil
Kaplan, Sarah - BA, MA, PhD
Krashinski, Harry - MA, PhD
Krass, Dmitry - BS, MEng, PhD
Latham, Gary - BA, MS, PhD
Lederman, Mara - BA, PhD
Lee, Byung Soo - BS, MA, PhD
Lee, Spike - MS, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Liao, Scott - MA, PhD (Academic Director, Full-Time MBA Program)
Lu, Hai - MBA, PhD, PhD
Mahrt-Smith, Jan - BSc, PhD
Malekian, Azarakhsh - BSc, MS, PhD
McCurdy, Tom - BA, MA, PhD
McEvily, Bill - BS, PhD
McGahan, Anita - BA, MA, MBA, PhD
Mehta, Nitin - BTech, MS, MS, PhD
Milner, Joseph - BSc, MS, PhD (Vice-Dean, MBA Programs)
Mitchell, Matthew - BS, MA, PhD
Mitchell, William - BBA, PhD (Co-Academic Director, Global Executive MBA for Healthcare and the Life Sciences Program)
Mohanram, Partha Sarathy - BTech, MBA, PhD
Moldoveanu, Miheana - BSc, MS, DBA
Moorthy, Sridhar - BSc, MBA, MS, PhD
Ormthanalai, Chay - BEng, PhD
Oxley, Joanne - BSc, MA, MBA, PhD
Reuber, Becky - BA, MSc, PhD
Richardson, Gordon - BA, MBA, PhD, CA
Rotenberg, Wendy - BA, MBA, PhD
Rotundo, Maria - BA, MA, PhD
Rowley, Timothy - BA, MBA, PhD (Academic Director, Morning and Evening MBA; Executive MBA Programs)
Ruthford, Scott - BSc, MBA
Ryall, Michael - BS, MBA, PhD
Shi, Mengze - BSc, MBA, PhD
Silverman, Brian - AB, MA, SM, PhD
Simutin, Mikhail - BA, PhD
Smieulasvskas, Waldemar - BS, MS, PhD
Soberman, David - BSc, MBA, PhD
Soman, Dilip - BE, MBA, PhD
Strange, William - BA, MA, PhD
Tilsik, Andras - AB, AM, PhD
Trefler, Daniel - BA, MPH, PhD
Tsai, Claire - BBA, MBA, PhD
Wang, Kevin - BS, MA, PhD
White, Alan - BEng, MBA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Members Emeriti

Amburgey, Terry - BS, MA, PhD
Bird, Richard - BA, MA, PhD
Brean, Donald J.S. - BA, MBA, MSc, PhD
D'Cruz, Joseph - BA, MBA, PhD
Dungan, D. Peter - BA, MA, PhD
邓, David - BComm, DPhil
Fisher, James - BA, MBA
Fleck, James - BA, DBA
Horstmann, Ignatius - BA, PhD
Kitunen, Joan - BBA, CA, CPA
Kolodny, Harvey - BEng, MBA, PhD
Losell, Donna - BA, MBA
Martin, Roger - AB, MBA
Menzefricke, Ulrich - MBA, DBA
Mitchell, Andrew - BA, PhD
Ondrack, Daniel - BComm, MBA, PhD
Pauly, Peter - MA, PhD
Verma, Anil - BTech, MBA, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members

Ashraf, Nouman - BCom, MBA
Barrette, Catherine - BCom, BCom
Beatty, David - BA, MA
Beausoleil, Angele - BAA, MA, PhD
Boyko, Dana Marta - BA, MA
Carr, Melanie - MD
Celerier, Claire - MSc, PhD
Corhay, Alexandre - BCom, MSc, PhD
Crawford, Robert - MHSc
Dimitriadis, Stefan - BA, MPH, AM, PhD
Djikic, Maja - PhD
Doering, Laura - BA, MA, PhD
Duke, Kristen - BA, PhD
Fam, Mark - MHSa
Geoffrey, Craig - BA, MBA
Inostroza Padilla, Nicolas - BS, MA, MA, PhD
Kahn, Michael - BCom
Kim, Daehyun - PhD
Liu, Shannon - BS, BA, PhD
Liu, Sheng - BS, PhD
MacKay, Alex - BSc, MA, PhD (Interim Vice-Dean, Undergraduate and Specialized Programs)
Manning, Ryan - BA, MA, PhD
Martin, Joe - BA
Oesch, John - BS, MSc, MBA, MEd, PhD
Powers, Richard - BPHE, BA, LLB, MBA
Reiter, Nayana - BBA, MSc, PhD
Richards, Dan - MBA
Romero, Gonzalo - BS, BS, PhD
Roshanaiel, Vahid - DE
Ruttan, Rachel - BA, MS, PhD
Schneider, Manfred - BCom, JD, MBA, CA, CPA
Shin, Jee-Eun - BA, MS
Stapleton, Maureen - MBA
Stojanovic, Dragana - BComm, MEd
Tan, Eugene - BS, BS, PhD

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university.
• Applicants must obtain a satisfactory score on the Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE; General Test). Test results are valid for five years.
• If required, completion of the following English proficiency tests:
  o Test of English as a Foreign Language (TOEFL)
    Internet-based format: overall score of 100 with a minimum of 22 on the writing and speaking sections.
  o International English Language Testing System (IELTS)
    Academic: score of 7.0 with minimum 6.5 required for each component.
• A minimum of two years of full-time work experience is strongly recommended.
• The Full-Time MBA program starts annually in August. Applicants for the Full-Time program are encouraged to apply as per the deadline dates (beginning in October with a final deadline in May).

Program Requirements

• Within this 20-month program (two academic years), students must complete a total of 11.3 full-course equivalents (FCEs) as follows:
  o Students must complete a structured sequence of required courses at the 1000 level. Each course has a weighting of one, two, or three modules. Three-module courses are equivalent to three credit hours. No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program.
  o Complete 0.5 FCE:
    ▪ A full-time internship work placement and RSM1380H Applied Management: Placement, which includes in-class lectures and coursework assessments; or
    ▪ If they are not taking an internship, RSM1381H Applied Management: Independent Study.
  o Complete 6.5 elective FCEs at the 2000 level (equivalent to thirteen 2000-level courses).
  o With the permission of the Academic Director, students may take up to four 2000-level courses from another graduate unit or participate in an international exchange program approved by the Rotman School of Management or the University of Toronto. In all cases, courses selected are subject to the approval of the Academic Director.
  o Students can take two experiential courses, as designated by a course number RSM27XX, for credit (1.0 FCE). For students who take more than two experiential courses, these would not be counted towards the MBA degree requirements. Students should be aware that the following restrictions apply:
    ▪ Students can only take RSM2709H Global Practicum for credit one time.
    ▪ Students can only take one from the following for credit: RSM2702H, RSM2703H, or RSM2705H.
    ▪ Students in combined degree programs with other schools or Faculties at the University of Toronto can take one experiential course for credit (0.5 FCE), unless exemption is granted.

• Students taking part in an exchange with one of the partner schools for four half credits or more cannot take the experiential learning courses for credit. Students taking part in an exchange with one of the partner schools for three half credits or less can take one experiential learning course (0.5 FCE) for credit.

Program Length

5 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years

Management, Rotman School: Management

MBA Full-Time Courses

Required Courses to be Completed in Year 1

Weighting for 1000-level courses is determined by the second digit of the four-digit course number as follows:

Second-Digit Course Weight

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<td>three credit hours</td>
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<th>Course Title</th>
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<tr>
<td>RSM1165H</td>
<td>Leveraging Diverse Teams (Credit/No Credit)</td>
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<td>RSM1201H</td>
<td>Foundations of Strategic Management</td>
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<td>Managerial Economics</td>
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<td>RSM1211H</td>
<td>Economic Environment of Business</td>
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<td>RSM1215H</td>
<td>Decision Making with Models and Data</td>
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<td>RSM1220H</td>
<td>Financial Accounting and Reporting: A Global Perspective</td>
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</table>

In addition to the above Year 1 courses, three 2000-level elective courses must also be taken in Year 1.
Required Courses to be Completed After Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM1160H</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>RSM1380H or RSM1381H</td>
<td>Applied Management: Placement or Applied Management: Independent Study</td>
</tr>
<tr>
<td></td>
<td>Ten 2000-level elective courses</td>
</tr>
</tbody>
</table>

Elective Courses for the Full-Time and Morning/Evening MBA Programs

Not all courses are offered every year. Consult the department each session about course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM2000H</td>
<td>Multi-disciplinary Special Topics</td>
</tr>
<tr>
<td>RSM2002Y</td>
<td>Research Project</td>
</tr>
<tr>
<td>RSM2003H</td>
<td>Research Project</td>
</tr>
<tr>
<td>RSM2008H</td>
<td>Creative Destruction Lab Intro</td>
</tr>
<tr>
<td>RSM2011H</td>
<td>International Strategy</td>
</tr>
<tr>
<td>RSM2012H</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>RSM2013Y</td>
<td>Creative Destruction Lab Advanced (prerequisite: RSM2008H)</td>
</tr>
<tr>
<td>RSM2015H</td>
<td>Non-Market Strategy</td>
</tr>
<tr>
<td>RSM2016H</td>
<td>Data-Based Strategic Modelling</td>
</tr>
<tr>
<td>RSM2017H</td>
<td>Pharmaceutical Strategy</td>
</tr>
<tr>
<td>RSM2018H</td>
<td>Strategy in Emerging Markets</td>
</tr>
<tr>
<td>RSM2019H</td>
<td>Corporation 360</td>
</tr>
<tr>
<td>RSM2020H</td>
<td>Health Sector Strategy and Organizations</td>
</tr>
<tr>
<td>RSM2021H</td>
<td>Corporate Strategy</td>
</tr>
<tr>
<td>RSM2023H</td>
<td>Strategic Change and Implementation</td>
</tr>
<tr>
<td>RSM2030H</td>
<td>Canadian Business History</td>
</tr>
<tr>
<td>RSM2040H</td>
<td>Special Topics in Strategy (prerequisite: RSM1201H)</td>
</tr>
<tr>
<td>RSM2052H</td>
<td>Management Consulting</td>
</tr>
<tr>
<td>RSM2054H</td>
<td>Technology Strategy</td>
</tr>
<tr>
<td>RSM2055H</td>
<td>Cooperative Strategy</td>
</tr>
<tr>
<td>RSM2056H</td>
<td>Competitive Strategic Analysis</td>
</tr>
<tr>
<td>RSM2058H</td>
<td>Communicating Strategy</td>
</tr>
<tr>
<td>RSM2059H</td>
<td>Healthcare and Life Sciences Consulting: Field Application Project</td>
</tr>
<tr>
<td>RSM2060H</td>
<td>Digital Strategy</td>
</tr>
<tr>
<td>RSM2061H</td>
<td>Strategic Networks</td>
</tr>
<tr>
<td>RSM2062H</td>
<td>Management Consulting Practicum</td>
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<tr>
<td>RSM2063H</td>
<td>Catastrophic Failure in Organizations</td>
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<tr>
<td>RSM2081H</td>
<td>Social Entrepreneurship</td>
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<td>RSM2083H</td>
<td>Special Topics in Strategic Management</td>
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<tr>
<td>RSM2085H</td>
<td>Healthcare Innovation</td>
</tr>
<tr>
<td>RSM2087H</td>
<td>Multi-Disciplinary Special Topics</td>
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<td>RSM2088H</td>
<td>Designing for Equality</td>
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<tr>
<td>RSM2099H</td>
<td>Special Topics in Strategic Management</td>
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<tr>
<td>RSM2109H</td>
<td>Rotman Study Tour</td>
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<tr>
<td>RSM2113H</td>
<td>Model-Based Decision Making in Practice</td>
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<tr>
<td>RSM2116H</td>
<td>Special Topics in Business Economics</td>
</tr>
<tr>
<td>RSM2122H</td>
<td>Clean Energy: Policy Context and Business Opportunities</td>
</tr>
<tr>
<td>RSM2123H</td>
<td>International Business in the World Economy</td>
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<tr>
<td>RSM2125H</td>
<td>Game Theory and Applications for Management</td>
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<tr>
<td>RSM2126H</td>
<td>Real Estate Development</td>
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<tr>
<td>RSM2127H</td>
<td>Economic Environment of International Business</td>
</tr>
<tr>
<td>RSM2128H</td>
<td>Real Estate Economics</td>
</tr>
<tr>
<td>RSM2129H</td>
<td>Forecasting Models and Econometric Methods</td>
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<tr>
<td>RSM2130H</td>
<td>Real Estate Investment</td>
</tr>
<tr>
<td>RSM2132H</td>
<td>Business and the City</td>
</tr>
<tr>
<td>RSM2203H</td>
<td>Current Issues in Financial Reporting and Disclosure</td>
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<tr>
<td>RSM2204H</td>
<td>Taxation and Decision-Making</td>
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<tr>
<td>RSM2209H</td>
<td>Financial Statement Analysis</td>
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<tr>
<td>RSM2210H</td>
<td>Financial Distress and Insolvency</td>
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<tr>
<td>RSM2211H</td>
<td>Business Law</td>
</tr>
<tr>
<td>RSM2212H</td>
<td>Business Analysis and Valuation</td>
</tr>
<tr>
<td>RSM2300H</td>
<td>Corporate Financing</td>
</tr>
<tr>
<td>RSM2301H</td>
<td>Financial Management</td>
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<tr>
<td>RSM2302H</td>
<td>Security Analysis and Portfolio Management</td>
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<tr>
<td>RSM2303H</td>
<td>Risk Modelling and Financial Trading Strategies</td>
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<tr>
<td>RSM2304H</td>
<td>Financial Institutions and Capital Markets</td>
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<tr>
<td>RSM2305H</td>
<td>International Financial Management</td>
</tr>
<tr>
<td>RSM2306H</td>
<td>Options and Futures Markets</td>
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<tr>
<td>RSM2307H</td>
<td>Advanced Derivatives</td>
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<tr>
<td>RSM2308H</td>
<td>Financial Risk Management</td>
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<tr>
<td>RSM2309H</td>
<td>Mergers and Acquisitions</td>
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<tr>
<td>RSM2310H</td>
<td>Analysis and Management of Fixed Income Securities</td>
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<tr>
<td>RSM2312H</td>
<td>Value Investing</td>
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<tr>
<td>RSM2314H</td>
<td>Private Equity and Entrepreneurial Finance</td>
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<tr>
<td>RSM2315H</td>
<td>Management of Private Wealth</td>
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<tr>
<td>RSM2316H</td>
<td>Introduction to Hedge Funds and Broker Dealers</td>
</tr>
<tr>
<td>RSM2317H</td>
<td>Special Topics in Finance</td>
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<tr>
<td>RSM2318H</td>
<td>Special Topics in Finance</td>
</tr>
<tr>
<td>RSM2319H</td>
<td>The Revolution in Finance: Markets, Institutions, and Organizations</td>
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<tr>
<td>RSM2320H</td>
<td>The Canadian and American Financial Systems — Comparisons and Contrasts</td>
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<td>RSM2321H</td>
<td>Special Topics in Finance</td>
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<tr>
<td>RSM2326H</td>
<td>How Banks Work: Management in a New Technological Age</td>
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<td>RSM2327H</td>
<td>Islamic Finance in Canada</td>
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<td>RSM2328H</td>
<td>Machine Learning and Financial Innovation</td>
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<tr>
<td>RSM2401H</td>
<td>Data and Information Management for Business Analytics</td>
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<td>RSM2405H</td>
<td>Supply Chain Management</td>
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<td>RSM2406H</td>
<td>Operations Management Strategy</td>
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<td>RSM2407H</td>
<td>Services Operations Management</td>
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<td>RSM2408H</td>
<td>Modeling and Optimization for Decision Making</td>
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<td>RSM2409H</td>
<td>Management Analytics</td>
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<td>RSM2410H</td>
<td>Analytics and Operations Consulting</td>
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<td>RSM2415H</td>
<td>Special Topics in Management Science</td>
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<td>RSM2416H</td>
<td>Special Topics in Operations Management</td>
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<td>RSM2500H</td>
<td>Marketing Strategy</td>
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<td>RSM2504H</td>
<td>Consumer Behaviour</td>
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<td>RSM2505H</td>
<td>Strategic Marketing Communications</td>
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<td>RSM2506H</td>
<td>Marketing Research</td>
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<td>RSM2508H</td>
<td>Sales Management</td>
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<td>RSM2511H</td>
<td>Fintech Marketing: Innovation in the Marketing of Financial Services</td>
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<td>RSM2512H</td>
<td>Branding</td>
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<td>RSM2513H</td>
<td>Pricing</td>
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<td>RSM2515H</td>
<td>Special Topics in Marketing</td>
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<td>RSM2516H</td>
<td>Special Topics in Marketing</td>
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<td>RSM2517H</td>
<td>Futures Thinking: Developing Business Insight</td>
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<td>RSM2519H</td>
<td>Managing Customer Value 2.0</td>
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<td>RSM2520H</td>
<td>Special Topics in Marketing</td>
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<td>RSM2521H</td>
<td>Marketing Using Information Technology</td>
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<tr>
<td>RSM2522H</td>
<td>Marketing and Behavioural Economics</td>
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<td>RSM2523H</td>
<td>Business Design Fundamentals</td>
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<td>RSM2524H</td>
<td>Business Design Practicum</td>
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<td>One to One Marketing</td>
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<td>RSM2531H</td>
<td>Special Topics in Marketing</td>
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<tr>
<td>RSM2532H</td>
<td>Special Topics in Marketing</td>
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<tr>
<td>RSM2601H</td>
<td>Organization Design</td>
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<tr>
<td>RSM2603H</td>
<td>Advanced Negotiations and Conflict Management</td>
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<tr>
<td>RSM2604H</td>
<td>Managerial Negotiations</td>
</tr>
<tr>
<td>RSM2606H</td>
<td>Designing New Work Organizations</td>
</tr>
<tr>
<td>RSM2609H</td>
<td>Aligning People and Strategy</td>
</tr>
<tr>
<td>RSM2612H</td>
<td>Managing Talent for Global Operations</td>
</tr>
<tr>
<td>RSM2615H</td>
<td>Special Topics in Organizational Behaviour and Human Resource Management</td>
</tr>
<tr>
<td>RSM2616H</td>
<td>Special Topics in Organizational Behaviour and Human Resource Management</td>
</tr>
<tr>
<td>RSM2618H</td>
<td>The Socially Intelligent Manager</td>
</tr>
<tr>
<td>RSM2619H</td>
<td>Power and Influence in Organizations</td>
</tr>
<tr>
<td>RSM2620H</td>
<td>Leading Teams</td>
</tr>
<tr>
<td>RSM2621H</td>
<td>Effective Leadership</td>
</tr>
<tr>
<td>RSM2625H</td>
<td>Business Problem Solving: A Model-Based Approach</td>
</tr>
<tr>
<td>RSM2640H</td>
<td>Leading Social Innovation</td>
</tr>
<tr>
<td>RSM2700H</td>
<td>Independent Study Project (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2701H</td>
<td>Global Consulting Project (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2702H</td>
<td>OnBoard (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2703H</td>
<td>CityLab (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2705H</td>
<td>C-Suite (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2706H</td>
<td>Special Topics in Finance</td>
</tr>
<tr>
<td>RSM2709H</td>
<td>Global Practicum (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM2913H</td>
<td>Getting It Done®</td>
</tr>
<tr>
<td>RSM2918H</td>
<td>Multidisciplinary Special Topics</td>
</tr>
<tr>
<td>RSM2920H</td>
<td>Top Manager’s Perspective</td>
</tr>
</tbody>
</table>
Management, Rotman School: Management
MBA Extended Full-Time

Extended Full-Time MBA Program (Morning/Evening)

Program Description

The Rotman Morning/Evening MBA programs are designed for working professionals in the Greater Toronto Area. The 32-month, cohort-based format allows working professionals to continue working while studying for their MBA. Students may explore new directions, expand leadership skills, and build close ties with a lifelong network. There are two program options:

- The Morning MBA allows working professionals to complete their master's before work — from 7:00 to 9:00 am, two mornings a week.
- The Evening MBA allows students to get a fresh perspective on real-world challenges from globally renowned faculty after work — from 6:30 to 8:30 pm, two evenings a week.

In the second half of the MBA program, students have the choice to specialize in a career path with a range of electives, including those taught during regular working hours.

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School’s additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university.
- Applicants must obtain a satisfactory score on the Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE; General Test).
- A minimum of two years of full-time work experience.
- Two professional references.
- Resumé.
- Essays.
- Interview.
- If required, completion of the following English proficiency tests:
  - Test of English as a Foreign Language (TOEFL) Internet-based format: overall score of 100 with a minimum of 22 on the writing and speaking sections.
  - International English Language Testing System (IELTS) Academic: score of 7.0 with minimum 6.5 required for each component.

Program Requirements

- This program, designed for working professionals, covers the equivalent of two academic years delivered over a 32-month period.
- Students complete requirements through either the Morning or Evening program options.
- Coursework: students must complete required and elective courses as follows:
  - Required: Students must complete a structured sequence of required courses at the 1000 level. Each course has a weighting of one, two, or three modules. Three-module courses are equivalent to three credit hours. No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program.
  - Elective: 5.0 full-course equivalents (FCEs) at the 2000 level (equivalent to ten 2000-level courses). With the permission of the Academic Director, Morning/Evening MBA Programs, students may take up to five 2000-level courses from another graduate unit or participate in an international exchange program approved by the Rotman School of Management or the University of Toronto. In all cases, courses selected are subject to the approval of the Academic Director, Morning/Evening MBA Programs.

Program Length

8 sessions (3 years) (typical registration sequence: F/W/S/F/W/S/F/W)

Time Limit

3 years

Management, Rotman School: Management
MBA Extended Full-Time Courses

Required Courses

Weighting for 1000-level courses is determined by the second digit of the four-digit course number as follows:

<table>
<thead>
<tr>
<th>Second-Digit Course Weight</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>one credit hour</td>
</tr>
</tbody>
</table>
2 two credit hours
3 three credit hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM1160H</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>RSM1165H</td>
<td>Leveraging Diverse Teams (Credit/No Credit)</td>
</tr>
<tr>
<td>RSM1201H</td>
<td>Foundations of Strategic Management</td>
</tr>
<tr>
<td>RSM1210H</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>RSM1211H</td>
<td>Economic Environment of Business</td>
</tr>
<tr>
<td>RSM1215H</td>
<td>Decision Making with Models and Data</td>
</tr>
<tr>
<td>RSM1220H</td>
<td>Financial Accounting and Reporting: A Global Perspective</td>
</tr>
<tr>
<td>RSM1222H</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>RSM1231H</td>
<td>Finance I: Global Markets and Valuation</td>
</tr>
<tr>
<td>RSM1232H</td>
<td>Finance II: Corporate Finance</td>
</tr>
<tr>
<td>RSM1240H</td>
<td>Operations Management</td>
</tr>
<tr>
<td>RSM1250H</td>
<td>Managing Customer Value</td>
</tr>
<tr>
<td>RSM1260H</td>
<td>Leading People in Organizations</td>
</tr>
<tr>
<td>RSM1282H</td>
<td>Statistics for Management</td>
</tr>
<tr>
<td>RSM1365H</td>
<td>Leadership Development Practicum (Credit/No Credit)</td>
</tr>
</tbody>
</table>

0 Course that may continue over a program. Credit is given when the course is completed.

Elective Courses
See the full-time MBA course section.

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School's additional admission requirements stated below.
- Admission is restricted to applicants with current full-time employment and significant professional work and managerial experience:
  - 8+ years of full-time work experience.
  - 3+ years in a mid-to-senior management role.
- Demonstrated teamwork and leadership skills.
- People and/or project management experience.
- Admissions interview.
- A recognized undergraduate degree or equivalent.
- Applicants must obtain either a satisfactory score for the Executive MBA Diagnostic Tool (EDT), the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE; General Test).
- If required, completion of the following English proficiency tests:
  - Test of English as a Foreign Language (TOEFL) Internet-based format: overall score of 100 with a minimum of 22 on the writing and speaking sections.
  - International English Language Testing System (IELTS) Academic: score of 7.0 with minimum 6.5 required for each component.
- Applicants who meet all the minimum admission requirements will be assessed by the admissions committee on the basis of grades, standardized test scores, references, essays, professional experience, and a personal interview.

Program Requirements

- Within this 13-month program:
  - Students must complete 23 courses, including the set of 14 core courses, with an accumulated credit weighting of 11.50.
  - Students must complete a structured sequence of courses. No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program.
  - With the permission of the Academic Director, students in good standing may apply to participate and take up to one course in an international exchange program approved by the University of Toronto. Courses selected are subject to the approval of the Academic Director.

Program Length
4 sessions (13 months) full-time (typical registration sequence: F/W/S/F)

Time Limit
3 years
Management, Rotman School: Management Executive MBA Courses

Required Courses

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>RSM5001H</td>
<td>Strategy 1</td>
</tr>
<tr>
<td>RSM5011H</td>
<td>Capstone Project</td>
</tr>
<tr>
<td>RSM5101H</td>
<td>Economics 1</td>
</tr>
<tr>
<td>RSM5102H</td>
<td>Economics 2</td>
</tr>
<tr>
<td>RSM5201H</td>
<td>Accounting 1</td>
</tr>
<tr>
<td>RSM5301H</td>
<td>Finance 1</td>
</tr>
<tr>
<td>RSM5302H</td>
<td>Finance 2</td>
</tr>
<tr>
<td>RSM5401H</td>
<td>Business Operations</td>
</tr>
<tr>
<td>RSM5501H</td>
<td>Marketing 1</td>
</tr>
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<td>RSM5600H</td>
<td>Personal Leadership</td>
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<tr>
<td>RSM5602H</td>
<td>Negotiations</td>
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<tr>
<td>RSM5603H</td>
<td>The Business Environment: Ethics</td>
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<tr>
<td>RSM5604H</td>
<td>Leadership Development Practicum</td>
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<td></td>
<td>(Credit/No Credit)</td>
</tr>
<tr>
<td>RSM5801H</td>
<td>Quantitative Reasoning for Management</td>
</tr>
</tbody>
</table>

Non-core Courses

At the discretion of the Academic Director and the Vice-Dean, MBA Programs, up to four of the non-core courses may be substituted with elective courses from the list of electives offered for the Full-Time MBA and Extended Full-Time MBA (Morning/Evening) Programs. Students may also substitute up to two of the non-core courses with elective courses offered for the Global Executive Master of Business Administration (GEMBA) field. Note that the GEMBA field is only offered as part of the dual degree with Bocconi University. Available GEMBA electives vary each year. Courses will be communicated to students upon program start.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>RSM2609H</td>
<td>Aligning People with Strategy</td>
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<tr>
<td>RSM2619H</td>
<td>Power and Influence in Organizations</td>
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<tr>
<td>RSM5002H</td>
<td>Strategy 2</td>
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<tr>
<td>RSM5006H</td>
<td>Corporate Governance</td>
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<td>RSM5007H</td>
<td>International Business</td>
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<td>RSM5009H</td>
<td>Topics in Strategic Management</td>
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<tr>
<td>RSM5202H</td>
<td>Accounting 2</td>
</tr>
<tr>
<td>RSM5291H</td>
<td>Business Problem Solving: A Model-Based Approach</td>
</tr>
</tbody>
</table>

\( \text{*Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.} \)

Management, Rotman School: Management Executive MBA; Field: Global (Dual Degree)

Dual Degree Program: Global Executive Master of Business Administration (University of Toronto / Bocconi University)

Program Description

The Global Executive MBA (GEMBA) field may only be taken as part of a dual degree offered by the University of Toronto’s Rotman School of Management and Bocconi University’s SDA Bocconi School of Management. This offering is commonly referred to as the "Rotman-SDA Bocconi Global Executive MBA."

Spanning 18 months and seven business centres across four continents, the program accepts applications from full-time professionals in for-profit businesses, not-for-profit enterprises, research institutes, and entrepreneurial ventures from around the globe. The Rotman-SDA Bocconi GEMBA will change the way students think, network, and do business in some of the world’s largest markets: North America, East Asia, South Asia, Europe, and Latin America.

Upon successful completion of the degree requirements of both programs, students will receive an MBA from the Rotman School and a Global Executive MBA from SDA Bocconi.

Contact

www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/GEMBA

Rotman-SDA Bocconi Global Executive MBA Program
Rotman School of Management, University of Toronto
Email: gemba@rotman.utoronto.ca

Rotman-SDA Bocconi Global Executive MBA Program
SDA Bocconi School of Management, Bocconi University
Email: info@sdabocconi.it
Application Process

- Applicants may apply to either the Rotman School or SDA Bocconi.
- Applicants applying through Rotman must submit their application online.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School's additional admission requirements stated below.
- Five years of work experience with a minimum of two years at the management level (people, project, and/or budget management experience).
- Recognized undergraduate degree or equivalent.
- Applicants must obtain a satisfactory score for one of the following tests: the Rotman Executive Diagnostic Test (EDT), the SDA Bocconi diagnostic test, the Graduate Management Admission Test (GMAT), or the Graduate Record Examination (GRE; General Test). Test results are valid for five years. For further details, contact the admissions office.
- If required, completion of the following English proficiency tests:
  - Test of English as a Foreign Language (TOEFL) Internet-based format: overall score of 100 with a minimum of 22 on the writing and speaking sections.
  - International English Language Testing System (IELTS) Academic: score of 7.0 with minimum 6.5 required for each component.
- Current full-time employment.
- Ability to work in international teams and demonstrated leadership skills.

Program Requirements

Students complete 10 modules of between 5.5 and 8.5 days each, held in various cities. Within this 18-month dual degree program:

- Students must complete 26 courses worth **12.25 full-course equivalents (FCEs)** consisting of 24 required courses and 2 electives. The 2 electives may be taken through the Rotman School, or SDA Bocconi, or exchange partner schools (with courses at the latter pre-approved by the program Academic Directors). The available Rotman electives will be communicated approximately 4 to 6 months before the summer elective period (July and August).
- See the list of required Rotman courses below.

Program Length

5 sessions (18 months) full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years

Management, Rotman School: Management Executive MBA; Field: Global (Dual Degree) Courses

Required Courses for the Dual Degree Program, Global Executive MBA

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM1360H</td>
<td>Leading People in Organizations</td>
</tr>
<tr>
<td>RSM2012H</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>RSM2023H</td>
<td>Strategic Change and Implementation</td>
</tr>
<tr>
<td>RSM2524H</td>
<td>Business Design Practicum</td>
</tr>
<tr>
<td>RSM2615H</td>
<td>Special Topics in Organizational Behaviour and Human Resource Management</td>
</tr>
<tr>
<td>RSM5001H</td>
<td>Strategy 1</td>
</tr>
<tr>
<td>RSM5002H</td>
<td>Strategy 2</td>
</tr>
<tr>
<td>RSM5007H</td>
<td>International Business</td>
</tr>
<tr>
<td>RSM5008H</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>RSM5008H</td>
<td>Corporate Governance</td>
</tr>
<tr>
<td>RSM5101H</td>
<td>Economics 1</td>
</tr>
<tr>
<td>RSM5201H</td>
<td>Accounting 1</td>
</tr>
<tr>
<td>RSM5202H</td>
<td>Accounting 2</td>
</tr>
<tr>
<td>RSM5301H</td>
<td>Finance 1</td>
</tr>
<tr>
<td>RSM5302H</td>
<td>Finance 2</td>
</tr>
<tr>
<td>RSM5304H</td>
<td>Creating Value Through Acquisitions and Private Equity</td>
</tr>
<tr>
<td>RSM5401H</td>
<td>Business Operations</td>
</tr>
<tr>
<td>RSM5501H</td>
<td>Marketing 1</td>
</tr>
<tr>
<td>RSM5602H</td>
<td>Negotiations</td>
</tr>
<tr>
<td>RSM5603H</td>
<td>The Business Environment: Ethics</td>
</tr>
<tr>
<td>RSM5604H</td>
<td>Leadership Development Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>RSM5607H</td>
<td>Leveraging Diverse Teams (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>RSM5608H</td>
<td>Business Analytics</td>
</tr>
<tr>
<td>RSM5801H</td>
<td>Quantitative Reasoning for Management</td>
</tr>
<tr>
<td>RSM5901H</td>
<td>Managing Innovation</td>
</tr>
</tbody>
</table>

<sup>0</sup> Course that may continue over a program. The course is graded when completed.
Elective Courses

The available Rotman electives will be communicated approximately 4 to 6 months before the summer elective period (July and August).

RSM2698H Special Topics in Organizational Behaviour

Management, Rotman School: Management
Executive MBA; Field: Global Healthcare
and the Life Sciences

Field: Global Executive Master of Business
Administration for Healthcare and the Life
Sciences

Program Description

The intensive 18-month Global Executive MBA for Healthcare and the Life Sciences (GEMBA-HLS) is designed for working professionals in the healthcare and life sciences industries. This field of study immerses students in key healthcare and life sciences clusters around the world. By learning from leading faculty and experienced sector leaders, students gain the knowledge and skills needed for success. While exploring current and future best practices globally, students are guided through an in-depth assessment of their own capabilities with a view to becoming more impactful leaders.

Over the 18 months of the program, students will partake in six international modules in some of the world's key healthcare and life sciences markets (currently three in Toronto, and one each in the San Francisco Bay area; London, United Kingdom area; and Singapore). The program is delivered in a blended model, primarily face-to-face, supplemented with online learning. It leverages the strengths of the Rotman School, as well as relationships with the University of Toronto and the global healthcare and life sciences communities. Located on the edge of Toronto's medical discovery district, Rotman is uniquely positioned to play a leading role in the management innovations taking place in pharmacueticals and biotechnology, medical technology, medical informatics, telemedicine, insurance, patient engagement, long-term care, and health system design.

Minimum Admission Requirements

- Applicants are considered under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School's additional admission requirements stated below.
- Admission is restricted to applicants with significant professional work and managerial experience in healthcare or the life sciences:
  - 8+ years of full-time work experience.
  - 3+ years in a mid-to-senior leadership, management, or administrative role (or equivalent).
  - Demonstrated teamwork and leadership skills.
- A base of knowledge of healthcare or life sciences organizations.
- Evidence of academic achievement.
- Applicants must obtain either a satisfactory score for the Rotman Executive MBA Diagnostic Tool (EDT), the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE; General Test). Test results are valid for five years. See further details or contact the admissions office.
- If required, completion of the following English proficiency tests:
  - Test of English as a Foreign Language (TOEFL) Internet-based format: overall score of 100 with a minimum of 22 on the writing and speaking sections.
  - International English Language Testing System (IELTS) Academic: score of 7.0 with minimum 6.5 required for each component.
- Applicants who meet all the minimum admission requirements will be assessed by the admissions committee on the basis of grades, standardized test scores, references, essays, professional experience, and a personal interview.
- Please note that special program fees apply for this program.

Program Requirements

- Within this 18-month program, students must successfully complete a structured sequence of 23 courses with an accumulated credit weighting of 11.50. No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program.
- One or more of the course(s) may be substituted with course(s) offered in the regular MBA program at the discretion of the Academic Directors.
- The Global Executive MBA for Healthcare and the Life Sciences follows a blended model of delivery; i.e., a mix of face-to-face and online. It is offered during six residential modules (of between 7 and 11 days each) and study periods, held in various cities. Supplemental curriculum hours are delivered online.

Program Length

5 sessions (18 months) full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years
Management, Rotman School: Management
Executive MBA; Field: Global Healthcare
and the Life Sciences Courses

Required Courses

*At the discretion of the Academic Director and the Vice-Dean, MBA Programs, up to four of these courses may be substituted with courses from the list of electives offered for the Full-Time MBA and Extended Full-Time MBA (Morning/Evening MBA) Programs.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM2020H</td>
<td>Health Sector Strategy and Organizations</td>
</tr>
<tr>
<td>RSM2083H</td>
<td>Special Topics in Strategic Management</td>
</tr>
<tr>
<td>RSM2522H</td>
<td>Marketing and Behavioural Economics</td>
</tr>
<tr>
<td>RSM2524H</td>
<td>Business Design Practicum</td>
</tr>
<tr>
<td>RSM5001H</td>
<td>Strategy 1</td>
</tr>
<tr>
<td>RSM5007H</td>
<td>International Business</td>
</tr>
<tr>
<td>RSM5013H</td>
<td>Digital Health</td>
</tr>
<tr>
<td>RSM5014H</td>
<td>Data Analytics and Strategic Decision-Making in Health and Life Sciences</td>
</tr>
<tr>
<td>RSM5015H</td>
<td>Capstone Project</td>
</tr>
<tr>
<td>RSM5023H</td>
<td>Strategic Change and Implementation</td>
</tr>
<tr>
<td>RSM5101H</td>
<td>Economics 1</td>
</tr>
<tr>
<td>RSM5108H</td>
<td>Decision-Making with Models and Data</td>
</tr>
<tr>
<td>RSM5109H</td>
<td>Rotman Study Tour</td>
</tr>
<tr>
<td>RSM5201H</td>
<td>Accounting 1</td>
</tr>
<tr>
<td>RSM5301H</td>
<td>Finance 1</td>
</tr>
<tr>
<td>RSM5303H</td>
<td>Corporate Finance and Corporate Governance for Healthcare and the Life Sciences</td>
</tr>
<tr>
<td>RSM5401H</td>
<td>Business Operations</td>
</tr>
<tr>
<td>RSM5501H</td>
<td>Marketing 1</td>
</tr>
<tr>
<td>RSM5600H</td>
<td>Personal Leadership</td>
</tr>
<tr>
<td>RSM5602H</td>
<td>Negotiations</td>
</tr>
<tr>
<td>RSM5603H</td>
<td>The Business Environment: Ethics</td>
</tr>
<tr>
<td>RSM5604H</td>
<td>Leadership Development Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>RSM5801H</td>
<td>Quantitative Reasoning for Management</td>
</tr>
</tbody>
</table>

Management, Rotman School: Finance MF

Master of Finance

Program Description

The Master of Finance (MF) program provides the most in-depth theoretical and applied finance training currently available. Aimed at experienced working professionals, the program is delivered on Wednesday evenings and alternating Saturdays over 20 months. This enables students to advance their career without leaving work, and be able to apply the knowledge learned in the classroom immediately in the workplace. Students come from a variety of backgrounds such as financial risk, portfolio management, corporate finance, equity research, accounting, sales and trading, insurance, pensions, and legal settings.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university.
- A satisfactory score on the Graduate Management Admissions Test (GMAT) or GRE (Graduate Record Examination; General Test). Exemptions from the GMAT/GRE requirement are granted to applicants who have:
  - Passed the Common Final Exam (CFE) (or former UFE) for a Certified Professional Accountant (CPA) designation.
  - Passed at least the Level II examination of the Chartered Financial Analyst (CFA) designation.
  - Graduated from the University of Toronto with high distinction (cumulative grade point average of 3.5 or higher).
  - Attained the professional designation in Engineering (PEng) or in Actuarial Sciences (ACIA or FCIA).
- At least two years of full-time work experience in finance or a finance-related field is strongly recommended. Applicants who do not have the recommended work experience will be considered on a case-by-case basis, particularly if accompanied by demonstrated exceptional academic and professional potential.
- Applicants who meet all the criteria will be assessed on the basis of their application essay, grades, standardized graduate test scores, references, and professional experience by the admissions committee. Prospective students will then be invited for an admission interview. The admission decision will be based on both submitted materials and interview performance.

Program Requirements

- Within this 20-month program (two academic years):

  \(^0\) Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.
Students must complete a structured sequence of **5.75 full-course equivalents (FCEs)** (11.5 half-course equivalents) taken over five sessions. No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM4113H</td>
<td>Macroeconomics for Finance Professionals (0.25 FCE)</td>
</tr>
<tr>
<td>RSM4216H</td>
<td>Financial Reporting and Financial Statement Analysis</td>
</tr>
<tr>
<td>RSM4220H</td>
<td>Advanced Accounting Topics for Finance</td>
</tr>
<tr>
<td>RSM4310H</td>
<td>Foundations of Finance</td>
</tr>
<tr>
<td>RSM4314H</td>
<td>Risk Management and Financial Institutions</td>
</tr>
<tr>
<td>RSM4315H</td>
<td>Investment Banking and Corporate Valuation</td>
</tr>
<tr>
<td>RSM4317H</td>
<td>Analysis of Fixed Income Markets</td>
</tr>
<tr>
<td>RSM4318H</td>
<td>Applied Portfolio Management</td>
</tr>
<tr>
<td>RSM4319H</td>
<td>Forecasting Risks and Opportunities for Financial Securities</td>
</tr>
<tr>
<td>RSM4322H</td>
<td>Applications of Derivatives Products</td>
</tr>
<tr>
<td>RSM4323H</td>
<td>Investments</td>
</tr>
<tr>
<td>RSM4324H</td>
<td>Innovations in Financial Technology</td>
</tr>
</tbody>
</table>

Consult the departmental website for course descriptions.

**Program Length**

5 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W)

**Time Limit**

3 years

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**Management, Rotman School: Financial Risk Management MFRM**

**Master of Financial Risk Management**

**Program Description**

The Master of Financial Risk Management (MFRM) is designed to prepare students who excel at finance and quantitative analysis for careers in this in-demand sector. A bridge between academic and professional life, this full-time, ten-month program allows students to fast-track into the finance industry — giving them a competitive edge over applicants with only an undergraduate degree.

Students will gain a better understanding of the different types of risk, the regulatory environment, and how different financial institutions manage uncertainty. They consider the ways risk is measured and managed, looking at systems and models currently used within the financial sector.

Students have the opportunity to gain real-world experience during the Risk Management Project which takes place midway through the program. They will work on a real risk issue that is relevant and of interest to financial institutions. During the nine-week project, students will be taken out of the classroom and into industry, working with practising risk management professionals.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School's additional admission requirements stated below.

- **A recognized four-year undergraduate degree or equivalent:** A business, commerce, economics, mathematics, engineering, or actuarial science degree is preferred. However, other four-year undergraduate degrees will be considered if there is evidence of strong quantitative skills with a minimum B average in calculus, linear algebra, and statistics or econometrics.

- **Quantitative proficiency,** usually demonstrated through the completion of university-level courses with a minimum B average in calculus, linear algebra, and statistics or econometrics during the undergraduate degree.

- Two academic references.

- Essays (written essay, video questions, and real-time written response).

- English-language proficiency (if required).

- **Prerequisite knowledge in the following areas,** usually demonstrated through the completion of university-level courses:
  - Foundations of finance.
  - Financial accounting.
  - Investments.
  - Financial derivatives.
  - Applicants who have not completed courses in one or more of these subject areas may be offered admission conditional on successful completion of one or more qualifying examinations demonstrating equivalent knowledge.

- **Demonstrated knowledge of Python coding.** All offers of admission will be conditional upon the successful completion of a Python coding online course and examination. Applicants will be given access to online instruction modules in preparation for the examination and will have up to two attempts prior to the start date of the program.

- Applicants who meet all the criteria will be assessed on the basis of their application essays, answers to video questions, grades, and references by the admissions committee. Selected applicants will then be invited for an admission interview. The admission decision will be based on both submitted materials and interview performance.
Program Requirements

The MMA degree program is offered over 11 months using a cohort-based model. Students must complete a structured sequence of 13 half courses (5.5 full-course equivalents [FCEs]) on a full-time basis. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program. The MMA is designed for pre-experience graduates.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rotman School's additional admission requirements stated below.
- **Appropriate four-year undergraduate degree or equivalent:** Given the nature of the MMA program, degrees in Computer Science, Statistics, Mathematics, Engineering, Physical Science, Economics, and Commerce will be preferred, but degrees from any program where there is a significant quantitative and computational component will be considered.
- **Quantitative proficiency:** Evidence of a high level of proficiency (minimum B average) in quantitative subjects is required. Mastery of mathematics is essential including, at a minimum, calculus and linear algebra, as are courses covering probability and statistics. In cases where evidence of quantitative proficiency is not obvious, applicants must provide supplemental evidence.
- **Computational proficiency:** Demonstrated proficiency in computer programming. This may be demonstrated through a minimum B average in one or more courses in computer science or in courses relying extensively on computer programming. In cases where evidence of computational proficiency is not obvious, applicants must provide supplemental evidence.
- **English-language proficiency:** Applicants must demonstrate the ability to communicate in English in one of the following ways:
  - An undergraduate or graduate degree from a university at which the language of instruction and examination was English.
  - Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must achieve a Test of English as a Foreign Language (TOEFL) score of at least 100. The International English Language Testing System (IELTS) may be considered in special circumstances with a minimum score of 7.0 required.
- Two academic references.
- Essays (written essay, video questions, and real-time written response).
- All successful applicants are expected to demonstrate effective oral and written communication skills.
- Demonstration of academic ability: a high Graduate Management Admission (GMAT) or Graduate Record Examination (GRE) score is encouraged, though it is not mandatory.
- Applicants who meet all the criteria will be assessed on the basis of their application essays, answers to the video questions, grades, and references by the admissions committee. Selected applicants will then be invited for an admission interview. The admission decision will be based on both submitted materials and interview performance.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Management, Rotman School: Management Analytics MMA

Master of Management Analytics

Program Description

The professional Master of Management Analytics (MMA) degree program offers a curriculum that combines analytical depth with a focus on business issues and applications. Analytical depth is provided by courses on acquisition and structuring of data, predictive and prescriptive analytics, machine learning, artificial intelligence (AI) and deep learning, decision analysis, and simulation modelling. Courses applying analytics to business feature the use of analytics in marketing, operations, supply chain management, accounting, and finance. Students are exposed to real-life application of management analytics through the analytics practicum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM6301H</td>
<td>Topics in Financial Risk</td>
</tr>
<tr>
<td>RSM6302H</td>
<td>Financial Markets, Risk, and Institutions</td>
</tr>
<tr>
<td>RSM6303H</td>
<td>Regulation of Financial Institutions</td>
</tr>
<tr>
<td>RSM6304H</td>
<td>Operational Risk</td>
</tr>
<tr>
<td>RSM6305H</td>
<td>Credit Risk</td>
</tr>
<tr>
<td>RSM6306H</td>
<td>Probabilistic Modelling for Risk-Informed Decisions</td>
</tr>
<tr>
<td>RSM6307H</td>
<td>Macroeconomics for Financial Risk Management Professionals</td>
</tr>
<tr>
<td>RSM6308H</td>
<td>Advanced Investments</td>
</tr>
<tr>
<td>RSM6310H</td>
<td>Derivative Models for Risk Management</td>
</tr>
<tr>
<td>RSM6311H</td>
<td>Rotman Risk Management Project</td>
</tr>
<tr>
<td>RSM6313H</td>
<td>Innovations in Financial Technology</td>
</tr>
</tbody>
</table>
Program Requirements

- Students must be on campus by early to mid-August.
- Within this three-session program, students must complete a structured sequence of 6.5 full-course equivalents (FCEs) (13 half-course equivalents). No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program. The courses in the program are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM8224H</td>
<td>Analytic Insights Using Accounting and Financial Data</td>
</tr>
<tr>
<td>RSM8411H</td>
<td>Structuring and Visualizing Data for Analytics</td>
</tr>
<tr>
<td>RSM8413H</td>
<td>Big Data Analytics</td>
</tr>
<tr>
<td>RSM8414H</td>
<td>Tools for Probabilistic Models and Prescriptive Analytics</td>
</tr>
<tr>
<td>RSM8423H</td>
<td>Optimizing Supply Chain Management and Logistics</td>
</tr>
<tr>
<td>RSM8431Y</td>
<td>Analytics Colloquia</td>
</tr>
<tr>
<td>RSM8432H</td>
<td>Management Analytics Practicum</td>
</tr>
<tr>
<td>RSM8502H</td>
<td>Data-Based Management Decisions</td>
</tr>
<tr>
<td>RSM8512H</td>
<td>Modeling Tools for Predictive Analytics</td>
</tr>
<tr>
<td>RSM8521H</td>
<td>Leveraging AI and Deep Learning Tools in Marketing</td>
</tr>
<tr>
<td>RSM8522H</td>
<td>Analytics for Marketing Strategy</td>
</tr>
<tr>
<td>RSM8501H</td>
<td>Analytics in Management</td>
</tr>
</tbody>
</table>

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy additional admission requirements stated below.
- Admission to the program is available to students in Year 4 or to recent graduates of the following University of Toronto undergraduate programs:
  - Rotman's Bachelor of Commerce (Accounting Specialist).
  - University of Toronto Mississauga's Bachelor of Commerce (Accounting Specialist).
  - University of Toronto Scarborough's Bachelor of Business Administration (Specialist in Management and Accounting).
- University of Toronto students who are not currently completing one of the accounting specialist programs are required to take specific courses to be considered as applicants to the GDipPA program.
- Applicants from outside the University of Toronto: The accreditation that the University of Toronto has received from CPA Ontario specifies that only candidates with University of Toronto degrees, or equivalent, may be given advanced standing in the CPA Professional Education Program (PEP). In determining whether a degree from another Canadian university is equivalent, the admissions committee will review each submitted application individually. Prior to applying, applicants are encouraged to ensure that the courses they have taken meet the requirements for entry into CPA PEP.

Course requirements:

- Successful completion of all the courses required for entry into the CPA Professional Education Program (CPA PEP) as determined with CPA Ontario:
  - Required core courses: a minimum overall average of 70%.
  - Each individual core course: a minimum grade of 60%.
  - Each individual non-core course: a passing grade or 50%, whichever is higher.
• Applicants who meet all the criteria will be assessed on the basis of their application package and grades by the admissions committee. Selected applicants may be invited for an admission interview.

Program Requirements

Students must complete a structured sequence of 2.5 full-course equivalents (FCEs) (five half courses). No advanced standing will be granted for previous academic work completed or professional designations earned. Students who are unable to follow courses in their prescribed order must attain special approval from the Academic Director in order to continue in the program. The courses in the program are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSM7201H</td>
<td>Advanced Financial Reporting</td>
</tr>
<tr>
<td>RSM7202H</td>
<td>Advanced Taxation</td>
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<tr>
<td>RSM7203H</td>
<td>Advanced Topics in Assurance and Control</td>
</tr>
<tr>
<td>RSM7301H</td>
<td>Finance and Professional Practice</td>
</tr>
<tr>
<td>RSM7204H</td>
<td>Integration and Analysis</td>
</tr>
</tbody>
</table>

Program Length

1 session full-time (typical registration sequence: S)

Time Limit

2 years
Management, Tri-campus

Management, Tri-campus: Introduction

Faculty Affiliation

Management, Tri-campus

Degree Programs

Management

PhD

- Fields:
  - Accounting;
  - Business Economics;
  - Finance;
  - Marketing;
  - Operations Management;
  - Organizational Behaviour and Human Resources Management;
  - Strategic Management

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environmental Studies
  - Management, PhD
- Global Health (U of T Global Scholar)
  - Management, PhD

Overview

The PhD in Management at the University of Toronto is a vibrant and intellectually rich environment for those interested in developing new insights in management scholarship. There is a close-knit community of scholars who value and celebrate insightful, breakthrough research.

The PhD is a challenging program which features coursework, cutting-edge research training, and close working relationships with some of the best management academics in the world. Students work closely with faculty in a research-led culture which emphasizes rigor, creativity, and innovation. The curriculum is carefully designed to support students as publishing scholars as early as possible in their doctoral studies. The success of this program is evidenced in placements in leading business schools and the impressive careers of its graduates.

Contact and Address

Graduate Department of Management

Web: [www.rotman.utoronto.ca/Degrees/PhD](http://www.rotman.utoronto.ca/Degrees/PhD)
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Telephone: (416) 946-0894

Rotman School of Management
University of Toronto
105 St. George Street
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Management, Tri-Campus: Graduate Faculty

Full Members

Afeche, Philipp - BA, MS, PhD
Aggarwal, Pankaj - BEc, MBA, MBA, PhD
Agrawal, Ajay - BASc, MEng, MBA, PhD
Aivazian, Varouj - BS, MA, PhD
Amernic, Joel - BSc, MBA, CA
Anastakis, Dimitry - PhD
Averbakh, Igor - MSc, PhD
Bar-Isaac, Heski - BA, MS, PhD
Baron, Opher - BSc, MBA, PhD (Academic Director, Master of Management Analytics Program)
Baum-Snow, Nathaniel - AB, PhD
Baum, Joel - BA, MBA, PhD
Berman, Oded - BA, PhD
Blum, Bernardo - BA, MA, MA, PhD
Booth, Laurence - BSc, MBA, MA, DBA
Bova, Francesco - BComm, MPH, MBA, MA, PhD
Bowers, Anne - BA, MBA, PhD
Brooks, Leonard - BCom, MBA, CA, CPA
Callen, Jeffrey - BM, MBA, DPhil
Casciaro, Tiziana - BA, MS, PhD
Chandra, Ambarish - BMath, MEc, PhD
Chen, Feng - MA, PhD, CPA, CGA
Christianson, Marlys - MD, PhD
Christoffersen, Susan - BA, MA, PhD (Dean)
Connelly, Brian Samuel - BA, PhD
Corts, Kenneth - BA, MA, PhD (Vice-Dean, Research, Strategy, and Resources)
Côté, Stéphane - BSc, MA, PhD
Cunningham, William - BA, MPH, MS, MA, PhD
Davydenko, Sergei - MA, MSc, PhD (Academic Director, Master of Finance Program)
DeCelies, Katherine - BS, PhD (Academic Director, PhD Program)
Doidge, Craig Andrew - BComm, MSc, PhD (Vice-Dean, Faculty)
Dyck, Alexander - BA, PhD
Edwards, Alexander - BAC, MS, MAcct, PhD (Acting Director, Rotman Commerce Program)
Elitzur, Ramy - BA, MBA, PHM, PhD
Elkamhi, Redouane - BE, MBA, PhD
Feinberg, Matthew - BA, MEd, PhD
Florida, Richard - BA, PhD
Franco, April - BPhil, MEc, PhD
Frazer, Garth - BE, BM, MPH, MA, PhD
Galasso, Alberto - PhD
Gans, Joshua - BEc, PhD
Golden, Brian - BS, MS, PhD (Academic Director, Global Executive MBA and Co-Academic Director, Global Executive MBA for Healthcare and the Life Sciences Programs)
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BE, BM, MPH, MA, PhD
Galasso, Alberto - PhD
Gans, Joshua - BEc, PhD
Golden, Brian - BS, MS, PhD (Academic Director, Global Executive MBA and Co-Academic Director, Global Executive MBA for Healthcare and the Life Sciences Programs)
Goldfarb, Avi - BA, MA, PhD
Goldreich, David - BS, MS, PhD
Han, Bing - PhD
Han, Lu - BA, MA, PhD
Hansen, Samantha - BA, MA, PhD
Hawkins, Scott - BA, MS, PhD
Hejazi, Walid - BA, MA, PhD
Hirsh, Jacob - BSc, MA, PhD
Hoffman, Mitchell - BA, PhD
Hope, Ole-Kristian - MBA, PhD
Hossain, Tanjim - PhD
Hu, Ming - BS, MS, PhD
Hull, John - BA, MA, PhD
Hyatt, Douglas - BA, MA, PhD
Kan, Raymond - BSc, MBA, DPhil
Kang, Sonia - BSc, MA, PhD
Kaplan, Sarah - BA, MA, PhD
Kramer, Lisa - BBA, PhD
Kranse, Dmitry - BS, MEng, PhD
Lacetera, Nicola - PhD
Latham, Gary - BA, MS, PhD
Lederman, Mara - BA, PhD
Lee, Byung Soo - BS, MA, PhD
Lee, Spike - MS, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Li, Yue - BSc, MBA, PhD
Liao, Scott - MA, PhD (Academic Director, Full-Time MBA Program)
Lu, Hai - MBA, PhD, PhD
Maglio III, Sam James - AB, PhD
Mahr-Smith, Jan - BSc, PhD
Malekian, Azaraksh - BSc, MS, PhD
McCarthy, Julie - BA, MPSy, PhD
McCurdy, Tom - BA, MA, PhD
McEvily, Bill - BS, PhD
McGahan, Anita - BA, MA, MBA, PhD
Mehta, Nitin - BTech, MS, MS, PhD
Milner, Joseph - BSc, MS, PhD (Vice-Dean, MBA Programs)
Mitchell, Matthew - BS, MA, PhD
Mitchell, William - BBA, PhD (Co-Academic Director, Global Executive MBA for Healthcare and the Life Sciences Program)
Mohanram, Partha Sarathy - BTech, MBA, PhD
Moldoveanu, Mihnea - BSc, MSc, DBA
Moorthy, Srndhar - BSc, MBA, MS, PhD
Ornthanalai, Chay - BEng, PhD
Osborne, Matthew James - BA, PhD
Oxley, Joanne - BSc, MA, MBA, PhD
Park, Andreas - MEC, MPH, PhD
Reuber, Becky - BA, MSc, PhD
Richardson, Gordon - BA, MBA, PhD, CA
Riddough, Steven John - BSc, MPH, PhD
Rotenberg, Wendy - BA, MBA, PhD
Rotundo, Maria - BA, MA, PhD
Rowley, Timothy - BA, MBA, PhD (Academic Director, Morning and Evening MBA; Executive MBA Programs)
Ryall, Michael - BS, MBA, PhD
Saks, Alan - BA, MSc, PhD
Shaley, Ron - MPH, MA, PhD
Shi, Mengze - BSc, MBA, PhD
Silverman, Brian - AB, MA, SM, PhD
Simutin, Mikhail - BA, PhD
Smieliauskas, Waldemar - BS, MS, PhD
Soberman, David - BSc, MBA, PhD
Soman, Dilip - BE, MBA, PhD
Stark, Andrew - BA, MSc, AM, PhD
Strange, William - BA, MA, PhD
Tilcsik, Andras - AB, AM, PhD
Tob, Soo Min - BBA, PhD
Tombak, Mihkel - BS, MBA, AM, PhD
Treffler, Daniel - BA, MPH, PhD
Trougakos, John Peter - BS, MBA, PhD
Tsai, Claire - BBA, MBA, PhD
Virag, Gabor - BA, MA, PhD
Vyas, Dushyantkumar - PhD
Wahid, Aida - BA, MA, PhD
Wang, Kevin - BS, MA, PhD
Wei, Jason - BSc, MBA, PhD
Wensley, Anthony - MA, MA, MBA, PhD
White, Alan - BEng, MBA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
Wong, Franco - BA, MA, PhD
Xie, Jia Lin - BA, MBA, PhD
Xin, Baohua - PhD
Yang, Liyan - BA, MA, PhD
Ye, Minlei - PhD
Zhang, Ping - BA, MACct, MA, PhD
Zhong, Chenbo - BA, MA, PhD
Zweig, David - BA, MASc, DPhil

Members Emeriti
Amburgey, Terry - BS, MA, PhD
Bird, Richard - BA, MA, PhD
Borins, Sandford - BA, PhD
Brean, Donald J.S. - BA, MBA, MSc, PhD
D'Cruz, Joseph - BA, MBA, PhD
Dungan, D Peter - BA, MA, PhD
Fisher, James - BA, MBA
Fleck, James - BA, DBA
Guzn, Hugh - DPhil, PhD
Halpern, Paul - BCom, MBA, PhD
Horstmann, Ignatius - BA, PhD
Kolodny, Harvey - BEng, MBA, PhD
Martin, Roger - AB, MBA
Menzefricke, Ulrich - MBA, DBA
Mitchell, Andrew - BA, PhD
Ondrack, Daniel - BComm, MBA, PhD
Pauly, Peter - MA, PhD
Verma, Anil - BTech, MBA, PhD
Wilson, Thomas - BA, AM, PhD

Associate Members
Akey Jr., Pat - BCom, MRes, PhD
Bountali, Olga - BSc, MSc, PhD
Caou, El Hadi - BSc, MA
Cavenaile, Laurent Xavier C. - MA, MSc, PhD
Celerier, Claire - MSc, PhD
Chan, Cindy - BA, MS, PhD
Chattopadhyay, Akash - BE, MBA
Chen, Ningyuan - BS, MS, PhD
Cire, Andre Augusto - BSc, MSc, PhD
Corhay, Alexandre - BCom, MSc, PhD
Derksen, Laura - BSc, MSc, PhD
Dimitriadis, Stefan - BA, MPH, AM, PhD
Doering, Laura - BA, MA, MA, PhD
Down, Andrea - BA, MSc, PhD
Duke, Kristen - BA, PhD
Management, Tri-campus: Management PhD

Doctor of Philosophy

Program Description

The Graduate Department of Management offers a world-class doctoral program. Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master's degree or 2) direct entry following completion of a bachelor's degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants to all fields must also satisfy the Rotman School's additional admission requirements stated below.
- Some depth in the cognate disciplines relevant to the field is required.
- These requirements may be satisfied prior to entry to the PhD program through an MBA degree program coupled with a relevant undergraduate degree, or through an undergraduate degree in business, management, or commerce coupled with a discipline-based master's degree.
- If the depth requirements are completed prior to entry to the PhD program, then the student is expected to complete the program in four years. If additional coursework is required, then the student may need an additional year to complete the program.
- Applicants should provide:
  - transcripts from each post-secondary institution attended
  - a letter of intent for applying to the PhD program
  - an updated curriculum vitae (CV)
  - two reference letters
  - a valid GMAT or GRE score
  - proof of English-language proficiency, if applicable.

Program Requirements

- Students are expected to be qualified in the three basic disciplines essential to the study of management: economics, behavioural science, and quantitative analysis/statistics.
- Students in all fields normally complete coursework in one field and two areas of study during Years 1 and 2. In subsequent years of study, students concentrate on deepening knowledge through additional coursework and on generating unprecedented insights through research that culminates in a written doctoral thesis.
- COURSEWORK. Students must complete a minimum of 4.5 full-course equivalents (FCEs) to satisfy requirements for one field and two areas of study.
  - A minimum of 2.0 FCEs comprise the field. These will normally be taken from 3000-level Management courses, but additional courses from other departments may be required.
  - 2.0 FCEs: courses in the two areas of study are usually taken in cognate departments. Each area of study comprises at least 1.0 FCE.
  - Upon completion of the courses, students are expected to pass comprehensive examinations in the field.
  - Successful completion of the required course RSM3080H Research Methods in Business (0.5 FCE).
- A thesis embodying the results of original investigation must be submitted and defended at a Doctoral Final Oral Examination in accordance with the regulations of the School of Graduate Studies.
- During all years of study, students must maintain residency, whereby students are on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years

Time Limit

6 years
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants to all fields must also satisfy the Rotman School's additional admission requirements stated below.
- Some depth in the cognate disciplines relevant to the field of study is required.
- These requirements may be satisfied prior to entry to the PhD program through an MBA degree program coupled with a relevant undergraduate degree, or through an undergraduate degree in business, management, or commerce coupled with a discipline-based master's degree.
- If the depth requirements are completed prior to entry to the PhD program, then the student is expected to complete the program in five years. If additional coursework is required, then the student may need an additional year to complete the program.
- In exceptional cases, and at the discretion of the Rotman School, admission to the program by direct entry may be approved for applicants with an appropriate bachelor's degree with high standing (a least an A- average in courses relevant to the discipline) from a recognized university.
- Applicants should provide:
  - transcripts from each post-secondary institution attended
  - a letter of intent for applying to the PhD program
  - an updated curriculum vitae (CV)
  - two reference letters
  - a valid GMAT or GRE score
  - proof of English-language proficiency, if applicable.

Program Requirements

- Students are expected to be qualified in the three basic disciplines essential to the study of management: economics, behavioural science, and quantitative analysis/statistics.
- Students in all fields normally complete coursework in one field and two areas of study during Years 1 and 2. In subsequent years of study, students concentrate on deepening knowledge through additional coursework and on generating unprecedented insights through research that culminates in a written doctoral thesis.
- **Coursework.** Students must complete a minimum of 6.5 full-course equivalents (FCEs) to satisfy requirements for one field and two areas of study. Direct-entry students must complete 2.0 of the 6.5 FCEs within Year 1.
  - A minimum of 2.0 FCEs in the field. These will normally be taken from 3000-level Management courses, but additional courses from other departments may be required.
  - 2.0 FCE: courses in the two areas of study are usually taken in cognate departments. Each area of study comprises at least 1.0 FCE.
  - An additional 2.0 FCEs in any field related to the student's program of study.
  - Upon completion of the courses, students are expected to pass comprehensive examinations in the field.
  - Successful completion of the required course RSM3080H *Research Methods in Business* (0.5 FCE).

- A thesis embodying the results of original investigation must be submitted and defended at a Doctoral Final Oral Examination in accordance with the regulations of the School of Graduate Studies.
- During all years of study, students must maintain residency, whereby students are on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

- 5 years

Time Limit

- 7 years

Management, Tri-campus: Management PhD Courses

The department should be consulted at the onset of each session as to course offerings.

Courses Normally Restricted to PhD Students

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>RSM3001H</td>
<td>Research Methods in Strategic Management</td>
</tr>
<tr>
<td>RSM3002H</td>
<td>Advanced Topics in Strategy and Organization</td>
</tr>
<tr>
<td>RSM3003H</td>
<td>Advanced Topics in Strategy and Economics</td>
</tr>
<tr>
<td>RSM3005H+</td>
<td>Strategic Management Workshop</td>
</tr>
<tr>
<td>RSM3010H</td>
<td>Special Topics in the Economics of Technology and Innovation</td>
</tr>
<tr>
<td>RSM3011H</td>
<td>Advanced Topics in the Theory of Industrial Organization</td>
</tr>
<tr>
<td>RSM3012H</td>
<td>Advanced Topics in Urban and Real Estate Economics</td>
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<td>RSM3013H</td>
<td>Workshop in Economics</td>
</tr>
<tr>
<td>RSM3020H</td>
<td>Financial Accounting: Theory and Empirical Research</td>
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<td>RSM3021H</td>
<td>Managerial Accounting Research Methods</td>
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<tr>
<td>RSM3022H</td>
<td>Auditing Seminar</td>
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<tr>
<td>RSM3023H</td>
<td>Topics in Accounting Research</td>
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<td>RSM3025H+</td>
<td>Workshop in Accounting</td>
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<td>RSM3029H</td>
<td>Special Topics in Accounting</td>
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<tr>
<td>RSM3030H</td>
<td>Financial Theory I</td>
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<tr>
<td>RSM3031H</td>
<td>Financial Theory II</td>
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<tr>
<td>RSM3032H</td>
<td>Empirical Methods in Finance</td>
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<td>RSM3033H</td>
<td>Current Topics in Finance</td>
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<tr>
<td>RSM3034H</td>
<td>Capital Markets Workshop</td>
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<tr>
<td>RSM3041H</td>
<td>Seminar in Operations Management</td>
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<td>RSM3045H</td>
<td>Advanced Topics in Operations Management I</td>
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<td>RSM3046H</td>
<td>Advanced Topics in Operations Management II</td>
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<td>RSM3049H</td>
<td>Special Topics in Operations Management</td>
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<td>RSM3051H</td>
<td>Marketing Theory I: Consumer Behaviour</td>
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<td>RSM3052H</td>
<td>Marketing Theory II: Strategy</td>
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<tr>
<td>RSM3053H</td>
<td>Behavioural Research Methods in Marketing</td>
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<td>RSM3054H</td>
<td>Current Topics in Consumer Behaviour</td>
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<td>RSM3055H</td>
<td>Econometric Methods in Marketing</td>
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<td>RSM3056H</td>
<td>Current Topics in Marketing Strategy</td>
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<td>RSM3057H</td>
<td>Workshop in Marketing (Credit/No Credit)</td>
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<tr>
<td>RSM3058H</td>
<td>The Psychology of Judgement and Decision Making</td>
</tr>
<tr>
<td>RSM3060H</td>
<td>Advances in Human Resource Management</td>
</tr>
<tr>
<td>RSM3062H</td>
<td>Methods and Research in Organizational Behaviour</td>
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<tr>
<td>RSM3064H</td>
<td>Advanced Topics in Organizational Behaviour</td>
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<td>RSM3065H</td>
<td>Meso Organizational Behaviour</td>
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<tr>
<td>RSM3066H</td>
<td>Quantitative Methods in the Applied Behavioural Sciences (prerequisite: RSM3062H)</td>
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<td>RSM3067H</td>
<td>Organizational Behaviour and Human Resources Management Seminar</td>
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<td>RSM3069H</td>
<td>Special Topics in Organizational Behaviour and Human Resources Management</td>
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<td>RSM3080H</td>
<td>Research Methods in Business</td>
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<td>RSM3090H</td>
<td>Reading Course in Approved Field</td>
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<tr>
<td>RSM3091H</td>
<td>Reading Course in Approved Field</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
Management, University of Toronto Scarborough

Management, University of Toronto Scarborough: Introduction

Faculty Affiliation

Management, University of Toronto Scarborough

Degree Programs

Accounting and Finance

MAccFin

Overview

The Master of Accounting and Finance (MAccFin) is the first program of its kind in North America. The MAccFin delivers a world-class, practical education experience that prepares students for designations in the finance sector (Chartered Financial Analyst) and the accounting profession (Chartered Professional Accountant). The MAccFin offers students a co-op internship to incorporate work experience into their academic studies. The program caters to students who seek to solve the multi-faceted issues that face today's business world.

Contact and Address

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Telephone: (416) 208-5098

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Canada

Management, UTSC: Graduate Faculty

Full Members

Franco, April - BPhil, MEc, PhD (Chair)
Wei, Jason - BSc, MBA, PhD
Zweig, David - BA, MASc, DPhil

Associate Members

Ahmed, Syed - BCom, MA, MBA

Chau, Derek - BCom, MBA, PhD
Chen, Liang - BA, MBA, MSc, PhD
Cire, Andre Augusto - BSc, MSc, PhD
Daga, Sandra - BA, MEd, CA, CGA
Harvey, Lisa - BBA, MAcc
Kong, Douglas - BBA, MBA (Academic Co-Director, Master of Accounting and Finance Program)
Laurence, Hugh - BA, LLB, MA, DPhil
Mazaheri, Ataollah - BMath, MEc, PhD
McConkey, William - BSc, MBA
Quan Fun, George - BA, MBA, CA, CMA
Shalev, Ron - MPH, MA, PhD (Academic Co-Director, Master of Accounting and Finance Program)

Management, University of Toronto Scarborough: Management MAccFin

Master of Accounting and Finance

Program Description

The professional MAccFin degree program is offered over 16 months using a cohort-based model. In this four-session program, students must be registered full-time and complete a sequence of courses. This program begins in the Summer session.

The MAccFin program is designed for applicants who have not yet entered the workforce. These pre-experience applicants apply to the program immediately after completing their undergraduate degree. Applicants complete the School of Graduate Studies online admissions application and submit all official transcripts, two reference letters, and a résumé. Applicants must submit a supplemental application form to the Department of Management, UTSC.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the additional admission requirements stated below.
- An appropriate four-year undergraduate degree with a specialization in accounting or equivalent, with a minimum overall average of a mid-B in all core courses. Admission to the program is extremely competitive, and meeting the minimum overall average does not guarantee admission.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must achieve:
  - A Test of English as a Foreign Language (TOEFL) score of at least 580 overall on the paper-based test and 5 on the Test of Written English (TWE); 100/120 on the Internet-based test and 22/30 on the writing and speaking sections.
  - In special circumstances, a minimum score of 7.0 on the International English Language Testing System (IELTS) may be considered for admission.
Program Requirements

- **Coursework.** Students must complete 8.5 full-course-equivalents (FCEs)* as follows:
  - Session 1: Summer
    - MAF1001H Advanced Topics in Financial Reporting (0.5 FCE)
    - MAF1002H Strategy, Governance and Management Accounting (0.5 FCE)
    - MAF2001H Economics and Quantitative Methods (0.5 FCE)
    - MAF2002H Advanced Corporate Finance (0.5 FCE)
    - MAF2003H Investment Analysis and Portfolio Management I (0.5 FCE)
    - MAF2004H Advanced Corporate Finance (0.5 FCE)
    - MAF2005H Derivatives (0.5 FCE)
    - MAF2006H Investment Analysis and Portfolio Management II (0.5 FCE)
    - MAF3005H Integration and Analysis: Critical Thinking and Decision Making I (0.25 FCE)
    - MAF4001H Advanced Seminar in Accounting and Finance I (Credit/No Credit, 0.0 FCE)
  - Session 2: Fall
    - MAF1003H Advanced Topics in Assurance (0.5 FCE)
    - MAF1004H Advanced Taxation (0.5 FCE)
    - MAF2004H Financial Statement Analysis and Equity Valuation (0.5 FCE)
    - MAF2005H Derivatives (0.5 FCE)
    - MAF2006H Investment Analysis and Portfolio Management II (0.5 FCE)
    - MAF3005H Integration and Analysis: Critical Thinking and Decision Making I (0.25 FCE)
    - MAF5001H Technical Update in Financial and Management Accounting (Credit/No Credit, 0.0 FCE)
    - MAF5002H Finance Capstone Course I (Credit/No Credit, 0.0 FCE)
  - Session 3: Winter
    - MAF4000H Co-op Internship (0.5 FCE)
  - Session 4: Summer
    - MAF1005H Current Issues in Accounting and Assurance (0.5 FCE)
    - MAF2007H Fixed Income (0.5 FCE)
    - MAF3001H Leadership in the 21st Century (0.25 FCE)
    - MAF3002H Strategy, Business Development and Sales (0.25 FCE)
    - MAF3003H Business Data Analytics (0.5 FCE)
    - MAF3004H Integration and Analysis: Board Report (0.5 FCE)
    - MAF3005H Integration and Analysis: Critical Thinking and Decision Making II (0.25 FCE)
    - MAF5004H Integrated Case Writing (Credit/No Credit, 0.0 FCE)

* A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MAccFin student who receives a final grade of FZ will be recommended for termination of registration from the MAccFin program.

Program Length

4 sessions full-time (typical registration sequence: S/F/W/S)

Time Limit

3 years full-time

Management, University of Toronto Scarborough: Management MAccFin Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>MAF1001H</td>
<td>Advanced Topics in Financial Reporting</td>
</tr>
<tr>
<td>MAF1002H</td>
<td>Strategy, Governance and Management Accounting</td>
</tr>
<tr>
<td>MAF1003H</td>
<td>Advanced Topics in Assurance</td>
</tr>
<tr>
<td>MAF1004H</td>
<td>Advanced Taxation</td>
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<tr>
<td>MAF1005H</td>
<td>Current Issues in Accounting and Assurance</td>
</tr>
<tr>
<td>MAF2001H</td>
<td>Economics and Quantitative Methods</td>
</tr>
<tr>
<td>MAF2002H</td>
<td>Advanced Corporate Finance</td>
</tr>
<tr>
<td>MAF2003H</td>
<td>Investment Analysis and Portfolio Management I</td>
</tr>
<tr>
<td>MAF2004H</td>
<td>Financial Statement Analysis and Equity Valuation</td>
</tr>
<tr>
<td>MAF2005H</td>
<td>Derivatives</td>
</tr>
<tr>
<td>MAF2006H</td>
<td>Investment Analysis and Portfolio Management II</td>
</tr>
<tr>
<td>MAF2007H</td>
<td>Fixed Income</td>
</tr>
<tr>
<td>MAF3001H</td>
<td>Leadership in the 21st Century</td>
</tr>
<tr>
<td>MAF3002H</td>
<td>Strategy, Business Development and Sales</td>
</tr>
<tr>
<td>MAF3003H</td>
<td>Business Data Analytics</td>
</tr>
<tr>
<td>MAF3004H</td>
<td>Integration and Analysis: Board Report</td>
</tr>
<tr>
<td>MAF3005H</td>
<td>Integration and Analysis: Critical Thinking and Decision Making I</td>
</tr>
<tr>
<td>MAF3006H</td>
<td>Integration and Analysis: Critical Thinking and Decision Making II</td>
</tr>
<tr>
<td>MAF4000H</td>
<td>Co-op Internship</td>
</tr>
<tr>
<td>MAF4001H</td>
<td>Advanced Seminar in Accounting and Finance I</td>
</tr>
<tr>
<td>MAF4002H</td>
<td>Advanced Seminar in Accounting and Finance II</td>
</tr>
<tr>
<td>MAF5001H</td>
<td>Technical Update in Financial and Management Accounting</td>
</tr>
<tr>
<td>MAF5002H</td>
<td>Finance Capstone Course I</td>
</tr>
<tr>
<td>MAF5003H</td>
<td>Finance Capstone Course II</td>
</tr>
<tr>
<td>MAF5004H</td>
<td>Integrated Case Writing</td>
</tr>
</tbody>
</table>
Management & Innovation

Management & Innovation: Introduction

Faculty Affiliation

University of Toronto Mississauga (UTM)

Degree Programs

Biotechnology

MBiotech

- Fields:
  - Biopharmaceutical;
  - Digital Health Technologies

Forensic Accounting

MFAcc

Management & Professional Accounting

MMPA

Management of Innovation

MMI

Sustainability Management

MScSM

- Concentrations:
  - Management;
  - Science

Urban Innovation

MUI

Combined Degree Programs

- UTM, Environmental Management (Major) Honours BA / MScSM
- UTM, Environmental Management (Specialist) Honours BA / MScSM
- UTM, Environmental Science (Major) Honours BSc / MScSM
- UTM, Environmental Science (Specialist) Honours BSc / MScSM

Diploma Programs

Investigative & Forensic Accounting

DIFA (Admissions have been administratively suspended. The program will close on April 30, 2022.)

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environmental Studies
  - Sustainability Management, MScSM
- Sexual Diversity Studies
  - Sustainability Management, MScSM

Overview

The Institute for Management & Innovation (IMI) is a hub that fosters inter- and transdisciplinary research and scholarship in the area of innovations of human, social, and organizational processes and transformational leadership, and develops high-calibre programs that are informed by and reflective of these activities. IMI produces transformational leaders with breadth and depth in one or more chosen fields of science, social science, humanities, and the professions and a focus on innovation as it applies to human interaction and relationships with society and technology, all closely linked to the external community.

IMI provides students with a platform to explore their scholarship in an environment that introduces them to different forms of analyses and critical thinking, solidifying their understanding of the questions and issues at hand. At the heart of IMI is a dedication to experiential education and work-integrated learning in academic programming. IMI offers professional master’s programs in professional and forensic accounting, biotechnology, innovation management, urban innovation, and sustainability, and an undergraduate minor in business, science, and entrepreneurship. IMI is also home to the BIGDataAIHUB and executive education (IMIx) and entrepreneurship support (ICUBE) programs.

Contact and Address

Institute for Management & Innovation

Web: www.utm.utoronto.ca/imi
Email: imi@utoronto.ca
Telephone: (905) 569-4565
Fax: (905) 569-4302

University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada
Biotechnology
Web: www.utm.utoronto.ca/mbiotech
Email: mbiotech@utoronto.ca
Telephone: (905) 569-4737
Fax: (905) 569-4302

Master of Biotechnology Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Forensic Accounting
Web: mfacc.utoronto.ca
Email: mfacc@utoronto.ca
Telephone: 905-569-4331
Fax: 905-569-4306

Master of Forensic Accounting Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management & Professional Accounting
Web: mmpa.utoronto.ca
Email: mmpa@utoronto.ca
Telephone: (905) 569-4318
Fax: (905) 569-4306

Master of Management & Professional Accounting Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management of Innovation
Web: www.utm.utoronto.ca/mmi
Email: mmi.utm@utoronto.ca
Telephone: (905) 569-4743
Fax: (905) 569-4302

Master of Management of Innovation Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Sustainability Management
Web: www.utm.utoronto.ca/mscsm
Email: mscsm.utm@utoronto.ca
Telephone: (905) 569-5803
Fax: (905) 569-4302

Master of Science in Sustainability Management Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Urban Innovation
Web: www.utm.utoronto.ca/mui
Email: mui@utoronto.ca
Telephone: (416) 864-8078
Fax: (905) 569-4302

Master of Urban Innovation
University of Toronto Mississauga
Innovation Complex, Second Floor
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Investigative & Forensic Accounting
Admissions have been administratively suspended.
Applicants may be interested in the Master of Forensic Accounting degree program listed above.

Telephone: (905) 569-4331
Fax: (905) 569-4306

Diploma in Investigative & Forensic Accounting Program
University of Toronto Mississauga
Innovation Complex, Suite 2200
3359 Mississauga Road
Mississauga, Ontario
L5L 1C6 Canada

Management & Innovation: Graduate Faculty

Full Members

Aggarwal, Pankaj - BEc, MBA, MBA, PhD
Aivazian, Varouj - BS, MA, PhD
Besco, Laurel - BES, MA, PhD
Brail, Shauna - BA, MA, PhD
Brooks, Leonard - BCom, MBA, CA, CPA
Caraway, Brett - BA, MA, PhD
Daniere, Amrita - AB, PhD
Galasso, Alberto - PhD
Hirsh, Jacob - BSc, MA, PhD
Hossain, Tanjim - BA, BS, PhD
Kang, Sonia - BSc, MA, PhD
Kant, Shashi - BE, MA, PhD
Krull, Ulrich - BSc, MSc, PhD
Lacetera, Nicola - PhD
Li, Yue - BSc, MBA, PhD
Park, Andreas - MEC, MPH, PhD
Prosser, Scott - BSC, MSc, DPhil
Rotenberg, Wendy - BA, MBA, PhD
Management & Innovation: Biotechnology

MBiotech

Master of Biotechnology

Program Description

The MBiotech is a 24-month interdisciplinary, course-based professional degree program. Students come from various science and/or engineering backgrounds with the common goal of pursuing a career in the biotechnology, medical device, and pharmaceutical industries.

The program meets the evolving needs of students and this global industry sector. Faculty and instructors from various University of Toronto Faculties, biotechnology and pharmaceutical industries, and governmental agencies provide a truly interdisciplinary learning experience. Introductory laboratory courses and a year-long work internship round out the broad-based learning environment.

The program is a full-time, course-based master's degree which is launched in May each year.

Field: Biopharmaceutical

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in any area of biological sciences, chemistry, engineering, or related field with a minimum mid-B standing in the final two years of study.
- Applicants who have completed their studies outside of Canada must also submit their Graduate Record Examination (GRE) Subject Test scores and meet the SGS minimum standards for English proficiency.
- The MBiotech program also evaluates applicants on their letter of intent, CV, three references, and both a science and business interview.

Program Requirements

- Students must complete 9.5 graduate full-course equivalents (FCEs) over a 24-month period:
  - 4.5 FCEs in MBiotech courses (includes credits for Seminar and Work Term Placement)
  - 3.5 FCEs in Biopharmaceutical courses
  - 1.5 FCEs in elective courses.
- An ongoing seminar series led by university, industry, and government specialists links all the participants with the academic, practical, and applied aspects of the program.

Management & Innovation: Non-program

Elective Courses

Institute for Management & Innovation

The following courses may be taken as electives by students enrolled in any U of T graduate program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMI1001H</td>
<td>Innovation and Entrepreneurship</td>
</tr>
<tr>
<td>IMI2001H</td>
<td>Special Topics in Management and Innovation</td>
</tr>
<tr>
<td>IMI3001H*</td>
<td>Biocommercialization I</td>
</tr>
<tr>
<td>IMI3003H</td>
<td>Biocommercialization II (Recommended co-requisite: IMI3001H. Exclusion: IMI3001H if completed before 2020-21.)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Program Length

6 sessions full-time (typical registration sequence: S/F/W/S/F/W)

Time Limit

3 years full-time

Required Courses

A general description of each required course is posted on the Biotechnology website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC1600H</td>
<td>Biopartnering I</td>
</tr>
<tr>
<td>BTC1610H</td>
<td>Biopartnering II</td>
</tr>
<tr>
<td>BTC1700H</td>
<td>Molecular Biology Laboratory</td>
</tr>
<tr>
<td>BTC1710H</td>
<td>Biomaterials and Protein Chemistry Theory</td>
</tr>
<tr>
<td>BTC1720H</td>
<td>Biomaterials and Protein Chemistry Lab</td>
</tr>
<tr>
<td>BTC1800H</td>
<td>Biotechnology in Medicine</td>
</tr>
<tr>
<td>BTC1810H</td>
<td>Biotechnology and Drug Manufacturing</td>
</tr>
<tr>
<td>BTC1820H</td>
<td>Biotechnology in Agriculture and Natural Products</td>
</tr>
<tr>
<td>BTC1900Y</td>
<td>Work Term I (Internship)</td>
</tr>
<tr>
<td>BTC1910Y</td>
<td>Work Term II (Internship)</td>
</tr>
<tr>
<td>BTC2000H</td>
<td>Effective Management Practices</td>
</tr>
<tr>
<td>BTC2010H</td>
<td>Fundamentals of Managerial Concepts</td>
</tr>
<tr>
<td>BTC2020H</td>
<td>Society, Organizations, and Technology</td>
</tr>
<tr>
<td>BTC2030H</td>
<td>Management of Technological Innovation</td>
</tr>
</tbody>
</table>

*Course that may continue over a program. The course is graded when completed.*

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC1840H</td>
<td>Patent Law for the Life Sciences</td>
</tr>
<tr>
<td>BTC1850H</td>
<td>Creating Life Science Products</td>
</tr>
<tr>
<td>BTC1860H</td>
<td>Generations of Advanced Medicine: Biologics in Therapy (GAMBIT)</td>
</tr>
<tr>
<td>BTC1920Y</td>
<td>Work Term III (Internship)</td>
</tr>
<tr>
<td>BTC2110H</td>
<td>Topics in Biotechnology</td>
</tr>
<tr>
<td>BTC2120H</td>
<td>Topics in Biotechnology</td>
</tr>
</tbody>
</table>

Other graduate courses approved by Program Directors.

Field: Digital Health Technologies

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in any area of biology, chemistry, computer science, engineering, epidemiology, psychology, public health, sociology, statistics, or related field with a minimum mid-B standing in the final two years of study.
- A minimum 1.0 credit of university-level statistics (or equivalent) with at least a mid-B standing.
- Applicants who have completed their studies outside of Canada must also submit their Graduate Record Examination (GRE) Subject Test scores and meet the SGS minimum standards for English proficiency.
- The MBiotech program also evaluates applicants on their letter of intent, CV, three references and both a science and business interview.

Program Requirements

- Students must complete **9.5 graduate full-course equivalents (FCEs)** over a 24-month period:
  - 4.5 FCEs in MBiotech courses (includes credits for Seminar and Placement)
  - 4.0 FCEs in Digital Health Technologies courses
  - 1.0 FCE in elective courses.
- An ongoing seminar series led by university, industry, and government specialists links all the participants with the academic, practical, and applied aspects of the program.

Program Length

6 sessions full-time (typical registration sequence: S/F/W/S/F/W)

Time Limit

3 years full-time

Required Courses

A general description of each required course is posted on the Biotechnology website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC1600H</td>
<td>Biopartnering I</td>
</tr>
<tr>
<td>BTC1610H</td>
<td>Biopartnering II</td>
</tr>
<tr>
<td>BTC1842H</td>
<td>Medical Device Reimbursement</td>
</tr>
<tr>
<td>BTC1859H</td>
<td>Data Science in Health I</td>
</tr>
<tr>
<td>BTC1877H</td>
<td>Data Science in Health Part II (Prerequisite: BTC1859H.)</td>
</tr>
<tr>
<td>BTC1882H</td>
<td>Digital Ethnography in Health</td>
</tr>
<tr>
<td>BTC1895H</td>
<td>Introduction to IT Consulting and Web Design</td>
</tr>
</tbody>
</table>
Management & Innovation: Forensic Accounting MFAcc

**Master of Forensic Accounting**

Admissions to the advanced-standing option of this program have been administratively suspended.

**Program Description**

The Master of Forensic Accounting (MFAcc) has been designed to provide graduates with the most thorough and rigorous preparation available in the investigative and forensic accounting field. Consequently, MFAcc graduates are expected to become recognized as the foremost forensic professionals in their chosen fields, whether those are in forensic accounting practice; in compliance functions in banks, insurance companies, and brokerages; business valuation; fraud investigation in law enforcement; securities enforcement; or in international forensic roles for the World Bank, the United Nations and its programs, and others.

**MFAcc Program (Two-Year)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation’s additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university in commerce, business administration, or accounting, with standing equivalent to at least a University of Toronto mid-B in the final year.
- Two years of relevant experience in business.
- Submission of an official MFAcc application via the [SGS online application system](#).

**Program Requirements**

- Completion of a total of 5.0 required full-course equivalents (FCEs) or 10 half courses, taken sequentially.
- This is a part-time program which uses a combination of a one-week intensive in-residence session and e-learning modules with group discussions, assignments, and formal examinations. It is possible for students to participate from anywhere in the world.

**Program Path**

**Year 1: Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA1900H</td>
<td>Forensic Accounting and Investigation, Fraud and Cybercrime</td>
</tr>
<tr>
<td>IFA1905H</td>
<td>Fraud Prevention, Risk Assessment and Investigation, Data Analytics and Security</td>
</tr>
</tbody>
</table>

**Year 1: Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA1906H</td>
<td>Money Laundering, Asset Tracing and Recovery, and International Aspects of Fraud</td>
</tr>
<tr>
<td>IFA1901H</td>
<td>Forensic Accounting Professional and Practice Issues</td>
</tr>
</tbody>
</table>

**Year 1: Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA1907H</td>
<td>Legal and Legal Process Issues for Forensic Accountants</td>
</tr>
</tbody>
</table>
Year 2: Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA2900H</td>
<td>Loss Quantification</td>
</tr>
<tr>
<td>IFA2905H</td>
<td>Advanced Forensic Investigation and</td>
</tr>
<tr>
<td></td>
<td>Psychological Aspects of White Collar Crime</td>
</tr>
</tbody>
</table>

Year 2: Winter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA2906H</td>
<td>Business Valuation, Bankruptcy and Insolvency, and Advanced Loss Quantification</td>
</tr>
<tr>
<td>IFA2903H</td>
<td>Research Project on Emerging Issues/Advanced Topics</td>
</tr>
</tbody>
</table>

Year 2: Summer

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA2904H</td>
<td>Integrative Capstone</td>
</tr>
</tbody>
</table>

Program Length

6 sessions part-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

6 years part-time

Management & Innovation: Forensic Accounting MFAcc Courses

Required Courses

Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA1900H</td>
<td>Forensic Accounting and Investigation, Fraud and Cybercrime</td>
</tr>
<tr>
<td>IFA1901H</td>
<td>Forensic Accounting Professional and Practice Issues</td>
</tr>
<tr>
<td>IFA1905H</td>
<td>Fraud Prevention, Risk Assessment and Investigation, Data Analytics and Security</td>
</tr>
<tr>
<td>IFA1906H</td>
<td>Money Laundering, Asset Tracing and Recovery, and International Aspects of Fraud</td>
</tr>
<tr>
<td>IFA1907H</td>
<td>Legal and Legal Process Issues for Forensic Accountants</td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA2900H</td>
<td>Loss Quantification</td>
</tr>
<tr>
<td>IFA2903H</td>
<td>Research Project on Emerging Issues/Advanced Topics</td>
</tr>
<tr>
<td>IFA2904H</td>
<td>Integrative Capstone</td>
</tr>
<tr>
<td>IFA2905H</td>
<td>Advanced Forensic Investigation and Psychological Aspects of White Collar Crime</td>
</tr>
<tr>
<td>IFA2906H</td>
<td>Business Valuation, Bankruptcy and Insolvency, and Advanced Loss Quantification</td>
</tr>
</tbody>
</table>

Minimum Admission Requirements

- Only applicants who graduated from the University of Toronto’s graduate Diploma in Investigative & Forensic Accounting (DIFA) program are eligible to apply. Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation’s additional admission requirements stated below.
- Submission of an official MFAcc application via the SGS online application system.
- Two letters of reference.

Program Requirements

- **Coursework.** Students must successfully complete **2.0 full-course equivalents (FCEs)** in required courses as follows:
  - 0.5 FCE: IFA1905H involves weekly online sessions, beginning in January for nine weeks
  - 0.5 FCE: IFA1906H involves weekly online sessions, beginning in March for nine weeks

*Involves an intensive, mandatory six-day in-residence session, held in August at the University of Toronto Mississauga.
Management & Innovation: Management & Professional Accounting MMPA

Master of Management & Professional Accounting

Program Description

The Master of Management & Professional Accounting (MMPA) program is designed to educate future leaders of the accounting profession at the master's level in management and at the professional level in accounting and related subjects. The curriculum is organized to provide an excellent understanding of:

- the challenges, functions, and needs of management;
- accounting, finance, auditing, and tax;
- essential professional subjects;
- management skills; and
- professional capabilities.

Students from any undergraduate background may apply. The MMPA is offered as a 27-month program, a 24-month advanced-standing option, and a 12-month advanced-standing option.

MMPA Program (27-Month)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree with a standing equivalent to at least a University of Toronto mid-B.
- Satisfactory Graduate Management Admission Test (GMAT) score. Note: the GMAT requirement will be waived for applicants who meet the following criteria:
  o have studied for four years at a North American university and graduated with a four-year degree, or
  o have graduated from one of the following programs: the University of Toronto Mississauga's BCom (Accounting specialist), the Rotman School's BCom (Accounting specialist), or the University of Toronto Scarborough's BBA (specialist in Management and Accounting).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must also demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

The program runs for 27 months covering seven sessions of full-time study.

- Co-op work placements. Students will also complete two co-op work placements (MGT1090H and MGT2090H) in accounting or finance-related areas.

Required Course List

Notations for all courses are indicated in parentheses following the course code and are determined as follows:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>CR/NCR (Credit/No Credit)</td>
</tr>
<tr>
<td>1</td>
<td>one module</td>
</tr>
<tr>
<td>2</td>
<td>two modules</td>
</tr>
<tr>
<td>3</td>
<td>three modules</td>
</tr>
</tbody>
</table>

One module equals five weeks with three contact hours per week. One module equals 0.25 FCE.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT1090H(0)*</td>
<td>Accounting Work-Term Course I</td>
</tr>
<tr>
<td>MGT1160H(1)</td>
<td>Communications</td>
</tr>
<tr>
<td>MGT1181H(1)</td>
<td>Introduction to Integration and Professional Decision Making</td>
</tr>
<tr>
<td>MGT1202H(2)</td>
<td>Ethics and Governance</td>
</tr>
<tr>
<td>MGT1210H(2)</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>MGT1211H(2)</td>
<td>Economic Environment of Business</td>
</tr>
<tr>
<td>MGT1221H(2)</td>
<td>Financial Accounting I</td>
</tr>
<tr>
<td>MGT1222H(2)</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>MGT1241H(2)</td>
<td>Operations Management</td>
</tr>
<tr>
<td>MGT1250H(2)</td>
<td>Marketing</td>
</tr>
<tr>
<td>MGT1272H(2)</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>MGT1301H(3)</td>
<td>Fundamentals of Strategic Management</td>
</tr>
<tr>
<td>MGT1323H(3)</td>
<td>Auditing and Reporting</td>
</tr>
<tr>
<td>MGT1330H(3)</td>
<td>Business Finance</td>
</tr>
<tr>
<td>MGT1362H(3)</td>
<td>Managing People in Organizations</td>
</tr>
<tr>
<td>MGT1382H(3)</td>
<td>Statistics for Management</td>
</tr>
<tr>
<td>MGT2004H(2)</td>
<td>Advanced Concepts in Strategic Management</td>
</tr>
<tr>
<td>MGT2014H(2)</td>
<td>The Legal Environment of Professions and Corporations</td>
</tr>
<tr>
<td>MGT2090H(0)*</td>
<td>Accounting Work-Term Course II</td>
</tr>
<tr>
<td>MGT2200H(1)</td>
<td>Government and Not-for-Profit Accounting, Reporting, and Control</td>
</tr>
<tr>
<td>MGT2205H(3)</td>
<td>Advanced Financial Accounting</td>
</tr>
<tr>
<td>MGT2206H(3)</td>
<td>Taxation I</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>MGT2207H(3)</td>
<td>Taxation II</td>
</tr>
<tr>
<td>MGT2224H(2)</td>
<td>Computer Auditing</td>
</tr>
<tr>
<td>MGT2225H(2)</td>
<td>Advanced Auditing Topics</td>
</tr>
<tr>
<td>MGT2250H(3)</td>
<td>Financial Reporting I</td>
</tr>
<tr>
<td>MGT2251H(3)</td>
<td>Financial Reporting II</td>
</tr>
<tr>
<td>MGT2260H(2)</td>
<td>Management Control</td>
</tr>
<tr>
<td>MGT2261H(2)</td>
<td>Advanced Management Accounting</td>
</tr>
<tr>
<td>MGT2280H(2)</td>
<td>Accounting Theory and Research</td>
</tr>
<tr>
<td>MGT2281H(1)</td>
<td>Mergers, Acquisitions, and Valuations</td>
</tr>
<tr>
<td>MGT2282H(1)</td>
<td>Integration and Professional Decision Making Initiatives I</td>
</tr>
<tr>
<td>MGT2283H(1)</td>
<td>Integration and Professional Decision Making Initiatives II</td>
</tr>
<tr>
<td>MGT2284H(1)</td>
<td>Capstone — Integrative Board Report</td>
</tr>
<tr>
<td>MGT2285H(1)</td>
<td>Integration and Professional Decision Making Initiatives III</td>
</tr>
<tr>
<td>MGT2286H(1)</td>
<td>Integration and Professional Decision Making Initiatives IV</td>
</tr>
<tr>
<td>MGT2301H(2)</td>
<td>Financial Management</td>
</tr>
</tbody>
</table>

Plus the following elective:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT2208H(1)</td>
<td>Taxation III</td>
</tr>
</tbody>
</table>

**Program Length**

7 sessions full-time (typical registration sequence: S/F/W/S/F/W/S)

**Time Limit**

3 years

**MMPA Program (24-Month Advanced-Standing Option)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree with a standing equivalent to at least a University of Toronto mid-B.
- Satisfactory Graduate Management Admission Test (GMAT) score. Note: the GMAT requirement will be waived for applicants who meet the following criteria:
  - have studied for four years at a North American university and graduated with a four-year degree, or
  - have graduated from one of the following programs: the University of Toronto Mississauga's BCom (Accounting specialist), the Rotman School's BCom (Accounting specialist), or the University of Toronto Scarborough's BBA (specialist in Management and Accounting).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must also demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- Applicants who have previously completed MGT1210H, MGT1211H, MGT1221H, MGT1222H, MGT1250H, and MGT1382H, or equivalent, with a grade of B- or better, may be eligible for admission to the 24-month option.

**Program Requirements**

The program runs for 24 months, covering six sessions of full-time study, as follows:

- **Co-op work placements.** Two co-op work placements (MGT1090H and MGT2090H) in accounting or finance-related areas.

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

**Time Limit**

3 years

**MMPA Program (12-Month Advanced-Standing Option)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree with a standing equivalent to a University of Toronto B+.
- Satisfactory Graduate Management Admission Test (GMAT) score. Note: the GMAT requirement will be waived for applicants who meet the following criteria:
  - have studied for four years at a North American university and graduated with a four-year degree, or
have graduated from one of the following programs: the University of Toronto Mississauga's BCom (Accounting specialist), the Rotman School's BCom (Accounting specialist), or the University of Toronto Scarborough's BBA (specialist in Management and Accounting).

- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must also demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

- Applicants from a BCom (Accounting specialist) program, with a CGPA of B+ or higher, who have previously completed MGT1210H, MGT1211H, MGT1221H, MGT1222H, MGT1227H, MGT1323H, MGT1330H, MGT1382H, MGT2014H, MGT2205H, MGT2206H, MGT2207H, MGT2224H, MGT2225H, MGT2250H, MGT2251H, MGT2260H, MGT2261H, and MGT2301H, or equivalent, with a grade of B- or better, may be eligible for admission to the 12-month option.

- Applicants to the 12-month option must have completed the courses listed while in a program accredited by the Chartered Professional Accountants of Canada.

Program Requirements

The program runs for 12 months, covering three sessions of full-time study, as follows:

- **Coursework.** Students must successfully complete a total of 6.5 full-course equivalents (FCEs) in required courses as follows: MGT1160H, MGT1181H, MGT1202H, MGT1241H, MGT1250H, MGT1301H, MGT1362H, MGT2004H, MGT2200H, MGT2280H, MGT2281H, MGT2282H, MGT2283H, MGT2284H, MGT2285H, and MGT2286H.

- **Co-op work placement.** One co-op work placement (MGT2090H) in accounting or finance-related areas taken in the Winter session.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years

Management & Innovation: Management of Innovation MMI

Master of Management of Innovation

Program Description

The Master of Management of Innovation (MMI) program is designed for students with a background in science and engineering. It is an accelerated 12-month professional degree for individuals pursuing management careers in technology-focused organizations. The MMI curriculum provides a strong foundation in economic analysis, technology management, business strategy, finance, accounting, marketing, and policy. The required academic nine core courses focus on management and economics, and students select three electives tailored to their interests and goals. A four-month mandatory internship requirement allows students to gain valuable, real-world work experience and an opportunity to demonstrate the key competencies they learn in the MMI program.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation's additional admission requirements stated below.

- Bachelor's degree in sciences or engineering or equivalent from a recognized university. Minimum overall average grade of B+ over the last two years of full-time academic study.

- Prerequisites or their equivalents are set by the MMI program.

- Resumé/curriculum vitae (CV), two pages maximum.

- Letter of intent outlining the applicant's interest in Management and Innovation, one page (750 words).

- Two academic letters of reference must be submitted by the applicant (or at least one academic and one professional reference). One reference must be provided directly from a faculty member familiar with the applicant's work and who holds an appointment in the program where the applicant most recently graduated.

- Applicants who obtained a degree outside North America must submit a competitive GMAT or GRE (General) examination result to be sent to the department.

- An on-site written personal statement.

- Attend an interview where fit, problem-solving capabilities and communication skills are assessed.

Program Requirements

- The 12-month program consists of an intensive 8-month core academic curriculum followed by a 4-month internship:
  - **Coursework.** 6.0 full-course equivalents (FCEs) as follows:
    - 4.5 FCEs in required courses (see list below)
    - 1.5 FCEs in electives (0.5 FCE in the Fall session and 1.0 FCE in the Winter session)
  - **Internship:** 0.5 FCE: MMI1100H MMI Internship.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time
Management & Innovation: Management of Innovation MMI Courses

Required Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMI1010H</td>
<td>Prices and Markets</td>
</tr>
<tr>
<td>MMI1020H</td>
<td>Introduction to Big Data Analysis</td>
</tr>
<tr>
<td>MMI1030H</td>
<td>Marketing Science</td>
</tr>
<tr>
<td>MMI1040H</td>
<td>Accounting</td>
</tr>
<tr>
<td>MMI1050H</td>
<td>Negotiations</td>
</tr>
<tr>
<td>MMI1060H</td>
<td>Finance</td>
</tr>
<tr>
<td>MMI1070H</td>
<td>Economics of Business Strategy</td>
</tr>
<tr>
<td>MMI1080H</td>
<td>Management of Technology</td>
</tr>
<tr>
<td>MMI1090H</td>
<td>Technology, Strategy, and Policy</td>
</tr>
<tr>
<td>MMI1100H</td>
<td>MMI Internship</td>
</tr>
</tbody>
</table>

Elective Courses

Students are encouraged to select electives that allow them to focus on their individual areas of interest. For this reason, the MMI program does not impose a selection of electives. Students are free to choose from all graduate courses across all disciplines at the University of Toronto. All selections are subject to approval in advance by the Program Director.

Management & Innovation: Sustainability Management MScSM

Master of Science in Sustainability Management

Program Description

The Master of Science in Sustainability Management (MScSM) is an interdisciplinary, course-based professional program. The program provides education that integrates knowledge from management, social, and natural sciences to address sustainability issues. The MScSM provides a strong foundation in sustainability management while offering an opportunity to specialize in a management or science concentration. The program is designed for students from diverse educational backgrounds such as management, social science, natural science, and engineering. The program was developed in consultation with leaders and prospective employers in business, non-profit, research, and government organizations.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation's additional admission requirements stated below.
  - An appropriate undergraduate degree from a recognized university in any area of natural science, social science, management, and engineering or any management, environment, or natural resource-driven background with a standing equivalent to at least a mid-B in the final year of the program.
  - Successful completion of an undergraduate statistics or mathematics course (0.5 full-course equivalent [FCE] or equivalent).
  - Resumé/cv/curriculum vitae (CV).
  - Letter of intent outlining the applicant's interest in sustainability issues (750 words).

Program Requirements

Management Concentration

- Coursework. Students must complete a total of 9.0 FCEs as follows:
  - 6.5 FCEs (11 required courses) including:
    - SSM1090H Capstone Course
    - SSM1100Y Research Paper I or SSM1101Y Research Paper II
  - 2.5 FCEs (5 elective courses) selected by chosen concentration as follows:
    - 2.0 FCEs from the Management elective courses
    - 0.5 FCE from the Science elective courses.
- Internship. A summer internship placement (two to four months).

Science Concentration

- Coursework. Students must complete a total of 9.0 FCEs as follows:
  - 6.5 FCEs (11 required courses) including:
    - SSM1090H Capstone Course
    - SSM1100Y Research Paper I or SSM1101Y Research Paper II
  - 2.5 FCEs (5 elective courses) selected by chosen concentration as follows:
    - 2.0 FCEs from the Science elective courses
    - 0.5 FCE from the Management elective courses.
- Internship. A summer internship placement (two to four months).

Program Path

Year 1: Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1010Y</td>
<td>Principles of Sustainability Management</td>
</tr>
<tr>
<td>SSM1020H</td>
<td>Decision Making for Sustainability Management</td>
</tr>
<tr>
<td>SSM1050H</td>
<td>Ecosystem Science</td>
</tr>
<tr>
<td>SSM1060H</td>
<td>Managing Sustainable Organizations</td>
</tr>
</tbody>
</table>
**Year 1: Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1030H</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>SSM1040H</td>
<td>Managerial Economics for Sustainability Management</td>
</tr>
<tr>
<td>SSM1070H</td>
<td>Sustainability Law and Policy</td>
</tr>
<tr>
<td>SSM1080H</td>
<td>Strategies for Sustainability Management</td>
</tr>
<tr>
<td>SSM1120H</td>
<td>Social Dimensions of Sustainability</td>
</tr>
</tbody>
</table>

**Year 1: Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1110H</td>
<td>Sustainability Management Internship</td>
</tr>
</tbody>
</table>

**Year 2: Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1100Y or SSM1101Y</td>
<td>Research Paper I or Research Paper II</td>
</tr>
<tr>
<td></td>
<td>Plus 1.5 FCE elective</td>
</tr>
</tbody>
</table>

**Year 2: Winter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1090H</td>
<td>Capstone Course — Sustainable Enterprise</td>
</tr>
<tr>
<td>SSM1100Y or SSM1101Y</td>
<td>Research Paper I or Research Paper II</td>
</tr>
<tr>
<td></td>
<td>Plus 1.0 FCE elective</td>
</tr>
</tbody>
</table>

**Program Length**

5 sessions full-time (typical registration sequence: F/W/S/F/W)

**Time Limit**

3 years full-time

**Management & Innovation: Sustainability Management MScSM Courses**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSM1010Y</td>
<td>Principles of Sustainability Management</td>
</tr>
<tr>
<td>SSM1020H</td>
<td>Decision Making for Sustainability Management</td>
</tr>
<tr>
<td>SSM1030H</td>
<td>Environmental Science</td>
</tr>
</tbody>
</table>

**Elective Courses**

Course selections need to be approved in advance by the Program Director.

**Science Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES1117H</td>
<td>Climate Change and Impact Assessment</td>
</tr>
<tr>
<td>EES1125H</td>
<td>Contaminated Site Remediation</td>
</tr>
<tr>
<td>ENV1002H</td>
<td>Environmental Policy</td>
</tr>
<tr>
<td>ENV1704H</td>
<td>Environmental Risk Analysis and Management</td>
</tr>
<tr>
<td>SSM2030H</td>
<td>Advanced Sustainability Management</td>
</tr>
<tr>
<td>SSM2050H</td>
<td>Special Topics in Sustainability</td>
</tr>
</tbody>
</table>

**Management Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES1124H</td>
<td>Environmental Project Management</td>
</tr>
<tr>
<td>ENV1707H</td>
<td>Environmental Finance and Sustainable Investing</td>
</tr>
<tr>
<td>RSM2918H</td>
<td>Multidisciplinary Special Topics</td>
</tr>
<tr>
<td>SSM2010H</td>
<td>Marketing in Sustainability Management</td>
</tr>
<tr>
<td>SSM2020H</td>
<td>Sustainability Ethics</td>
</tr>
<tr>
<td>SSM2040H</td>
<td>Applied Sustainability Management</td>
</tr>
<tr>
<td>SSM2050H</td>
<td>Special Topics in Sustainability</td>
</tr>
</tbody>
</table>
Management & Innovation: Investigative & Forensic Accounting DIFA

Diploma of Investigative & Forensic Accounting

Admissions have been administratively suspended. The program will close on April 30, 2022.

Program Description

The Diploma of Investigative Forensic Accounting (DIFA) program provides a rigorous and comprehensive education in investigative and forensic accounting (IFA) matters useful in becoming an expert IFA consultant, practitioner, and expert witness in legal proceedings. Expertise may include financial matters related to investigation for fraud, calculation of damages, advice in disputes, and preparation and delivery of information to the courts. For students who are graduate professional accountants, the diploma program is recognized as an excellent educational preparation for recognition as an expert in IFA.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management and Innovation's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in commerce, business administration, or accounting, with standing equivalent to at least a University of Toronto mid-B in the final year.
- Two years of relevant experience in accounting.
- An advanced-standing option is available for qualified students with comparable university-level or Chartered Business Valuator program courses.

Program Requirements

- **Coursework. 5.0 full-course equivalents (FCEs)** (ten half-courses) over a minimum 2.2-year period. Courses are taken sequentially and advanced-standing course exemptions are possible. The program is offered using a combination of two one-week intensive in-residence sessions, e-learning, and teleconference modules, with group discussions, assignments, and formal examinations. It is possible for students to participate from anywhere in the world.
- Advanced standing is available for qualified students; up to two courses in loss quantification and law may be counted.

Program Length

6 sessions (26 months) part-time

Time Limit

6 years part-time

Management & Innovation: Investigative & Forensic Accounting DIFA Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFA1900H</td>
<td>Forensic Accounting and Investigation, Fraud, and Cybercrime</td>
</tr>
<tr>
<td>IFA1901H</td>
<td>Forensic Accounting Professional and Practice Issues</td>
</tr>
<tr>
<td>IFA1902H</td>
<td>Legal Process — Introductory</td>
</tr>
<tr>
<td>IFA1903H</td>
<td>Investigative-Related Matters — Introductory</td>
</tr>
<tr>
<td>IFA1904H</td>
<td>Loss Quantification — Introductory</td>
</tr>
<tr>
<td>IFA2900H</td>
<td>Loss Quantification</td>
</tr>
<tr>
<td>IFA2901H</td>
<td>Investigative-Related Matters — Advanced</td>
</tr>
<tr>
<td>IFA2902H</td>
<td>Legal Process — Advanced</td>
</tr>
<tr>
<td>IFA2903H</td>
<td>Research Project on Emerging Issues/Advanced Topics</td>
</tr>
<tr>
<td>IFA2904H</td>
<td>Integrative Capstone</td>
</tr>
</tbody>
</table>

The courses IFA1900H and IFA2904H each involve a mandatory in-residence session at the University of Toronto Mississauga. IFA2904H requires participation in moot court and other experiential learning sessions. The remaining eight courses are offered via weekly online sessions.

Management & Innovation: Master of Urban Innovation MUI

Master of Urban Innovation

Program Description

The Master of Urban Innovation (MUI) is a full-time, professional program that will encompass studies in urban economic development, community capacity building, innovation management, local and regional governance, urban sustainability, and real estate development for innovation. The MUI will complement the suite of programs in management, innovation, and sustainability currently offered in the Institute for Management & Innovation and will build on the strengths of other key academic units at UTM, including the Departments of Geography, Economics, and Political Science, and the Institute of Communication, Culture, Information and Technology.

The objective of the MUI program is to respond to the growing job opportunities that exist for professionals trained in the fields of urban economic development and innovation through a cross-disciplinary approach. Upon graduation, MUI students will have acquired the analytical tools to enable them to produce effective economic development policies and plans, including a detailed knowledge of strategic management techniques, the role of real
estate markets in local economic development, and critical tools for financial analysis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute for Management & Innovation’s additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university in social sciences, management/commerce, or a related field such as architecture or civil engineering, with a standing equivalent to a mid B in the final year of the program.
- Successful completion of 0.5 full-course equivalent (FCE) in an undergraduate statistics course.
- Letter of intent.
- Three letters of reference.
- A writing sample.

Program Requirements

- Students must complete a total of 9.5 FCEs as follows:
  - 4.5 FCEs from core courses (MUI1010H, MUI1020H, MUI1030H, MUI1040H, MUI1050H, MUI1060H, MUI1075H, MUI1080H, MUI1090H)
  - 0.5 FCE summer internship (MUI1100H)
  - 1.0 FCE capstone group project (MUI2095Y)
  - 3.5 FCEs chosen from the elective course list below. Students are also strongly encouraged to select other electives not included in the list below. Course selections must be approved in advance by the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Management & Innovation: Master of Urban Innovation MUI Courses

Required Core Courses

Students will complete 6.0 required full-course equivalents (FCEs).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUI1010H</td>
<td>Introduction to Management of Urban Innovation</td>
</tr>
<tr>
<td>MUI1020H</td>
<td>Civic Engagement and Economic Development</td>
</tr>
<tr>
<td>MUI1030H</td>
<td>Urban and Regional Economic Development Theory</td>
</tr>
</tbody>
</table>

Elective Courses

Students will complete 3.5 elective FCEs.

MUI students can take any of the following courses as part of fulfilling the program's elective requirement. Students are also strongly encouraged to select other electives not included in the list below, that will align well with their career goals and interests, subject to the pre-approval of the program. It is recommended that students consult with the program on their elective course options during Year 1. Available course offerings are subject to change.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGR1610H</td>
<td>Geography of Finance and Financial Crisis</td>
</tr>
<tr>
<td>GLA2018H</td>
<td>Innovation and the City</td>
</tr>
<tr>
<td>IMI2001H</td>
<td>Special Topics in Management and Innovation</td>
</tr>
<tr>
<td>JMG2020H</td>
<td>Big Data</td>
</tr>
<tr>
<td>JPG1512H</td>
<td>Place, Politics, and the Urban</td>
</tr>
<tr>
<td>JPG1558H</td>
<td>The History and Geography of Cycles and Cycling</td>
</tr>
<tr>
<td>JPG1607H</td>
<td>Geography of Competition</td>
</tr>
<tr>
<td>MUI2010H</td>
<td>Sectoral Analysis</td>
</tr>
<tr>
<td>MUI2020H</td>
<td>Microeconomics of Competitiveness</td>
</tr>
<tr>
<td>MUI2030H</td>
<td>Planning for Jobs: Labour Market Transformations and Employment in 21st Century Cities</td>
</tr>
<tr>
<td>MUI2040H</td>
<td>Real Estate Development</td>
</tr>
<tr>
<td>MUI2050H</td>
<td>The Economics of Cities and Regions: Productivity, Technology, and Jobs</td>
</tr>
<tr>
<td>MUI2055H</td>
<td>Cities, Industry, and the Environment</td>
</tr>
<tr>
<td>MUI2060H</td>
<td>Comparative Urban Politics</td>
</tr>
<tr>
<td>MUI2070H</td>
<td>Planning and Governing the Metropolis</td>
</tr>
<tr>
<td>MUI2080H</td>
<td>Intelligent Communities/Smart Cities</td>
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<tr>
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<td>Marketing in Sustainability Management</td>
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<td>SSM2020H</td>
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Materials Science and Engineering

MSE: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Materials Science and Engineering

MASc

- Emphasis:
  - Sustainable Energy

MEng

- Emphases:
  - Advanced Manufacturing;
  - Advanced Soft Materials;
  - Advanced Water Technologies;
  - Analytics;
  - Biomanufacturing;
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  - Forensic Engineering;
  - Sustainable Energy

PhD

- Emphasis:
  - Sustainable Energy

Collaborative Specializations

The following collaborative specialization is available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Materials Science and Engineering, MASc, PhD

Overview

Climate change, energy availability, and resource depletion are today's global challenges. The Department of Materials Science and Engineering (MSE) is at the forefront of addressing these issues. MSE's research, education, and applications expertise in advanced materials engineering enables the development of new and sustainable technologies, creating innovative solutions for the global environment. As a world leader in materials applications and processing, the department's commitment to excellence fosters innovative thinking in its students, leading to the development of brilliant minds and ideas that make a global impact.

MSE research and studies address the general problem of understanding structure-property-processing-performance relationships in materials. Materials science subjects focus on the structure, properties, and application of advanced materials in areas such as: Advanced Manufacturing & Coating Techniques; Adaptive Materials; Biomaterials & Biotechnology; Computational Materials Engineering; Electronic Materials & Systems; Materials Fracture & Failure; Nanomaterials & Nanotechnology; Optoelectronics; Photovoltaics; Process Metallurgy; Surface Engineering; and Sustainable Mineral & Materials Processing.

Leading-edge research facilities house 11 electron microscopy and surface characterization instruments in the Ontario Centre for the Characterization of Advanced Materials (OCCAM) and five new analytical instruments in the Walter Curlook Materials Characterization & Processing Laboratory, where graduate students learn from world-renowned researchers.

Contact and Address

Web: mse.utoronto.ca
Email: materials.engineering@utoronto.ca
Telephone: (416) 978-3012
Fax: (416) 978-4155

Department of Materials Science and Engineering
University of Toronto
Wallberg Building
Room 140, 184 College Street
Toronto, Ontario M5S 3E4
Canada

Materials Science and Engineering: Graduate Faculty

Full Members

Barati Sedeh, Mansoor - BSc, MASc, PhD
Chattopadhyay, Kinnor - BEng, MEng, PhD
(Employed in Industrial Relations)
Coyle, Tom - BS, BA, ScD
Erb, Uwe - MSc, PhD
Grynpas, Marc - MSc, PhD
Hatton, Benjamin - BASc, MASc, PhD
(Hold Graduate Chair, Chair and Graduate Chair)
Hibbard, Glenn - BASc, PhD
Howe, Jane - PhD
Kherani, Nazir - BASc, MASc, PhD
Lian, Kenyn - BE, MASc, MSc, PhD
Lu, Zheng-Hong - BSc, MSc, PhD
Matsuura, Naomi - ME, PhD
Naguib, Hani - BSc, ME, PhD, PEng
Nogami, Jun - BASc, MASc, PhD
Perovic, Doug - BASc, BASc, PhD
Ramsay, Scott - BASc, MASc, PhD
Ruda, Harry - BSc, PhD
Singh, Chandra Veer - BASc, MTech, PhD (Associate Chair, Research)
Thorpe, Steven - BASc, MASc, PhD
Wang, Zhirui - BEng, BEng, MASc, PhD
Zou, Yu - BASc, MASc, PhD

Members Emeriti
Mclean, Alexander - BSc, PhD
Pilliar, Robert - BASc, PhD
Sommerville, Iain - BSc, PhD, ARCS

Associate Members
Marcuson, Samuel Walton - MS
Parsch, Fabian Mario - BSc, MSc, PhD
Sone, Eli - BSc, MS, PhD

MSE: Materials Science and Engineering
MASc

Master of Applied Science

Program Description
The MASc program provides students with an opportunity to pursue advanced study and research with the guidance of experts in their respective fields. Studying in a chosen area of specialty and developing skills through hands-on experience in the MSE world-class labs provides students with the ability to either pursue PhD studies or to move out into industry with enriched skills and knowledge. This full-time program demands commitment and passion for research in materials engineering. For those interested in continuing to PhD-level research, successful completion of the MASc is the normal route.

Minimum Admission Requirements
- Students are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering’s additional admission requirements stated below.
- For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  - Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

Program Requirements
- **Coursework.** The program of study normally includes 2.0 full-course equivalents (FCEs) (four half courses), including:
  - MSE1000H0, the mandatory weekly Graduate Research Seminar MASc (0.5 FCE)
  - three half courses (1.5 FCEs), one of which must be chosen from the list of MSE graduate course offerings.
- JDE1000H Ethics in Research, a non-credit graduate ethics seminar (0.0 FCE).
- The required thesis is based upon research work carried out in the department. The thesis must be presented at an oral examination.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years full-time

*Course that may continue over a program. The course is graded when completed.*

MSE: Materials Science and Engineering
MEng

Master of Engineering

Program Description
The MEng program has been developed for recent graduates who wish to pursue graduate-level studies but may not be interested in continuing to the PhD program. This program is also intended for working engineers who wish to augment their current knowledge and add to their credentials. The multidisciplinary nature of materials engineering and the coursework-only and coursework-plus-project options enable students to build personalized programs which best suit their individual interests and needs. The MSE MEng is recognized and respected by employers globally and can enhance and enrich the career opportunities of graduates.

The MEng program can be taken on a full-time, extended full-time, or part-time basis.
**Full-Time Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering’s additional admission requirements stated below.
- For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  - Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

**Program Requirements**

- For students with adequate undergraduate preparation, the normal program will include 5.0 **full-course equivalents (FCEs)** (10 half courses). A project may be substituted for 1.5 FCEs (3 half courses). Students enrolled in this option work in consultation with a professor who acts as advisor for the project undertaken. An oral presentation of the project may be required.
- Students normally complete the requirements in three sessions (one year).
- Full-time MEng students may transfer to the research-stream MASc program if they meet all of the following criteria:
  - The request to transfer must be submitted at the beginning of the second session of enrolment. For example, students enrolled in September must successfully complete 1.5 FCEs (three half courses), technical courses of which at least one must be from MSE, with a B+ or 78% average. The technical courses taken during the MEng program will be credited toward the MASc program.
  - Have a supervisor who is willing to provide funding for an MASc research project starting in the second session of enrolment.
- Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

**Program Length**

3 sessions full-time (typical registration sequence: F/W/S);

**Time Limit**

3 years

**Extended Full-Time Option**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering’s additional admission requirements stated below.
- For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  - Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

**Program Requirements**

- For students with adequate undergraduate preparation, the normal program will include 5.0 **full-course equivalents (FCEs)** (10 half courses). A project may be substituted for 1.5 FCEs (3 half courses). Students enrolled in this option work in consultation with a professor who acts as advisor for the project undertaken. An oral presentation of the project may be required.
- Students are expected to complete the requirements in six sessions (two years). They are limited to six half courses per year and three half courses per session.
- Full-time MEng students may transfer to the research-stream MASc program if they meet all of the following criteria:
  - The request to transfer must be submitted at the beginning of the second session of enrolment. For example, students enrolled in September must successfully complete 1.5 FCEs (three half courses), technical courses of which at least one must be from MSE, with a B+ or 78% average. The technical courses taken during the MEng program will be credited toward the MASc program.
  - Have a supervisor who is willing to provide funding for an MASc research project starting in the second session of enrolment.
- Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

**Program Length**

6 sessions (typical registration sequence: F/W/S/F/W/S);

**Time Limit**

3 years
Part-Time Option

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering’s additional admission requirements stated below.
• For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  o paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  o Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

Program Requirements

• For students with adequate undergraduate preparation, the normal program will include 5.0 full-course equivalents (FCEs) (10 half courses). A project may be substituted for 1.5 FCEs (3 half courses). Students enrolled in this option work in consultation with a professor who acts as advisor for the project undertaken. An oral presentation of the project may be required.
• Students are limited to four half courses per year and two half courses per session.
• Students normally complete the requirements in nine sessions (three years).
• Students have the option of completing an emphasis in Advanced Manufacturing; Advanced Soft Materials; Advanced Water Technologies; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; or Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

9 sessions

Time Limit

6 years

MSE: Materials Science and Engineering PhD

Doctor of Philosophy

Program Description

Pursuing a PhD degree, the most advanced research degree in the Faculty of Applied Science and Engineering, can be a stepping stone to an academic career or to an industrial career which would benefit from in-depth applied research and research skills. Under the guidance of an accomplished supervisor, PhD students engage in original research that contributes to a variety of fields of study. Four years of PhD study allowing students to collaborate with local and international colleagues culminates in a written thesis which is presented orally and evaluated by experts. This is a degree program for outstanding students.

Applicants may enter the PhD program via one of three routes: 1) following successful completion of an MASc degree; 2) transfer from the University of Toronto MASc program to continue work that was begun at that level; or 3) direct entry following completion of an appropriate bachelor's degree.

The program can also be taken on a flexible-time basis.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering (MSE)'s additional admission requirements stated below.
• Students are normally expected to have completed a master's-level program before entering the PhD program.
• For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  o Paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  o Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

Program Requirements

• The primary subject in a program will be extractive and process metallurgy, physical metallurgy, or materials science.
• Coursework. The program of study normally includes 2.0 full-course equivalents (FCEs) (four half courses), including the weekly Graduate Research Seminar, and a thesis. The coursework selected normally includes:
  o MSE2000H0 Graduate Research Seminar PhD (0.5 FCE).
  o Three half courses (1.5 FCEs), at least one of which must be chosen from the list of MSE graduate course offerings.
  o The departmental seminar, comprising a minimum of two seminars presented to the academic staff and students of MSE.
• Students must complete the seminar JDE1000H Ethics in Research, a non-credit course (0.0 FCE).
• A general **Qualifying Examination** must be scheduled and taken within 12 months of initial registration. In case of failure, one further attempt within 3 months is allowed, no later than within 15 months of initial registration. No further attempts are permitted. In order to take this examination, students must complete all required coursework except for the Graduate Research Seminar PhD.

• The Qualifying Examination consists of:
  o A report (25 to 30 pages) of research to date, in the form of a dossier.
  o A presentation (20 to 25 minutes) summarizing research, with particular emphasis on providing a critical assessment of the literature in the field, a central hypothesis of thesis, proposed methodology, and recent experimental progress.
  o An oral examination, immediately following the presentation, by the Qualifying Examination committee who will ask the candidate questions pertaining to either the presented material, or related questions in materials science. The student is expected to have a working-level knowledge of the fundamentals of materials science as it pertains to the proposed area of research, and on a broader basis, at the level of a second-year undergraduate student in Materials Science.

• The required **thesis** is based upon research work carried out in the department in the areas of extractive and process metallurgy, physical metallurgy, or materials science.

• Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

**Program Length**

4 years

**Time Limit**

6 years

\(^0\) Course that may continue over a program. The course is graded when completed.

**PhD Program (Transfer)**

**Transfer Requirements**

• Very strong MASc students may apply to transfer to the PhD program after completing one year of the MASc program. Regulations governing such transfers are available in the MSE Graduate Studies office.

**Program Requirements**

• The primary subject in a program will be extractive and process metallurgy, physical metallurgy, or materials science.

• **Coursework.** The program of study normally includes **2.5 full-course equivalents (FCEs)**, including the weekly Graduate Research Seminar PhD, and a thesis. The coursework selected normally includes:
  o Three half courses (1.5 FCEs) from the MASc program
  o MSE2000H\(^0\) Graduate Research Seminar PhD (0.5 FCE)
  o An additional 0.5 graduate FCE.

• A general **Qualifying Examination** must be scheduled and taken within 12 months of initial registration. In case of failure, one further attempt within 3 months is allowed, no later than within 15 months of initial registration. No further attempts are permitted. In order to take this examination, students must complete all required coursework except for the Graduate Research Seminar PhD. The Qualifying Examination consists of:
  o A report (25 to 30 pages) of research to date, in the form of a dossier.
  o A presentation (20 to 25 minutes) summarizing research, with a particular emphasis on providing a critical assessment of the literature in the field, a central hypothesis of the thesis, proposed methodology, and recent experimental progress.
  o An oral examination, immediately following the presentation, by the Qualifying Examination committee who will ask the candidate questions pertaining to either the presented material, or related questions in materials science. The student is expected to have a working-level knowledge of the fundamentals of materials science as it pertains to the proposed area of research, and on a broader basis, at the level of a second-year undergraduate student in Materials Science.

\(^0\) Course that may continue over a program. The course is graded when completed.
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering (MSE)'s additional admission requirements stated below.
- Exceptionally strong BASc students with an average grade of A– over the final four sessions of undergraduate studies (excluding Summer sessions in some cases) may be considered for direct entry to the PhD program.
- For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  - Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.

Program Requirements

- The primary subject in a program will be extractive and process metallurgy, physical metallurgy, or materials science.
- **Coursework.** The program of study normally includes 3.0 full-course equivalents (FCEs) (six half courses), including the weekly Graduate Research Seminar PhD, and a thesis. The coursework selected normally includes:
  - MSE2000H0 Graduate Research Seminar PhD (0.5 FCE).
  - Five half courses (2.5 FCEs), at least two of which must be chosen from the list of MSE graduate course offerings.
- Students must complete the seminar JDE1000H Ethics in Research, a non-credit course (0.0 FCE).
- A general Qualifying Examination must be scheduled and taken within 12 months of initial registration. In case of failure, one further attempt within 3 months is allowed, no later than within 15 months of initial registration. No further attempts are permitted. In order to take this examination, students must complete all required coursework except for the Graduate Research Seminar PhD. The Qualifying Examination consists of:
  - A report (25 to 30 pages) of research to date, in the form of a dossier.
  - A presentation (20 to 25 minutes) summarizing research, with particular emphasis on providing a critical assessment of the literature in the field, a central hypothesis of thesis, proposed methodology, and recent experimental progress.
  - An oral examination, immediately following the presentation, by the Qualifying Examination committee who will ask the candidate questions pertaining to either the presented material, or related questions in materials science. The student is expected to have a working-level knowledge of the fundamentals of materials science as it pertains to the proposed area of research, and on a broader basis, at the level of a second-year undergraduate student in Materials Science.
- The required thesis is based upon research work carried out in the department in the areas of extractive and process metallurgy, physical metallurgy, or materials science.
- Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

Program Length

5 years

Time Limit

7 years

0 Course that may continue over a program. The course is graded when completed.

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PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Materials Science and Engineering (MSE)'s additional admission requirements stated below.
- Students must have completed a master's-level program before entering the PhD program.
- For students whose primary language is not English, the department requires a Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL: minimum score of 580 and 4 on the Test of Written English (TWE)
  - Internet-based TOEFL: minimum score of 93/120 and 22/30 on the writing and speaking sections.
- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option.

Program Requirements

- The primary subject in a program will be extractive and process metallurgy, physical metallurgy, or materials science.
- Students must complete 2.0 full-course equivalents (FCEs) (four half courses) as follows:
  - Year 1: 1.0 FCE plus the non-credit seminar JDE1000H Ethics in Research (0.0 FCE).
  - Year 2: 0.5 FCE. Prepare a research proposal and pass the Qualifying Examination.
  - Year 3: Present the first seminar for MSE2000H0 Graduate Research Seminar PhD (0.5 FCE).
  - Year 4: Research and writing.
  - Year 5: Research and writing. Present the second seminar for MSE2000H0.
• Students in the flexible-time option are registered full-time during the first four years and part-time during subsequent years in the program.

• The general Qualifying Examination must be scheduled and taken within 12 months of initial registration. In case of failure, one further attempt within 3 months is allowed, no later than within 15 months of initial registration. No further attempts are permitted. In order to take this examination, students must complete all required coursework except for the Graduate Research Seminar PhD. The Qualifying Examination consists of:
  o A report (25 to 30 pages) of research to date, in the form of a dossier.
  o A presentation (20 to 25 minutes) summarizing research, with particular emphasis on providing a critical assessment of the literature in the field, a central hypothesis of thesis, proposed methodology, and recent experimental progress.
  o An oral examination, immediately following the presentation, by the Qualifying Examination committee who will ask the candidate questions pertaining to either the presented material, or related questions in materials science. The student is expected to have a working-level knowledge of the fundamentals of materials science as it pertains to the proposed area of research, and on a broader basis, at the level of a second-year undergraduate student in Materials Science.

• The required thesis is based upon research work carried out in the department in the areas of extractive and process metallurgy, physical metallurgy, or materials science.

• Students have the option of completing an emphasis in Sustainable Energy as part of their degree program. Please see details in the Materials Science and Engineering MASc, MEng, PhD Emphases section.

Program Length
6 years

Time Limit
8 years

° Course that may continue over a program. The course is graded when completed.

Materials Science and Engineering

Elective Courses — Manufacturing Engineering


Elective Courses — Manufacturing Management


Emphasis: Advanced Soft Materials (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:


Students may double-count one course at most towards any MSE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Advanced Water Technologies (MEng only)

MEng students must successfully complete a total of 2.0 full-course equivalents (FCEs) (four half courses). This includes at least one course (0.5 FCE) selected from the core course list. The remaining courses must be selected from the elective course list.

• Core courses (complete at least one):
  o CHE1150H Industrial Water Technology
  o CIV1308H Physical and Chemical Treatment Processes
  o CIV1309H Biological Treatment Processes

MSE: Materials Science and Engineering

MASc, MEng, PhD Emphases

Emphasis: Advanced Manufacturing (MEng only)

MEng students must successfully complete:

• Four half courses (2.0 full-course equivalents [FCEs]), including at least one core course.

• Elective courses may include other core courses, and courses from either of two streams: Manufacturing Engineering and Manufacturing Management.
Enrolment Contact

Enrolment in the emphasis is permitted at any time during the MEng program. After students are admitted to the normal MEng program, students may contact Prof. Ron Hofmann, (416) 946-7508.

Upon successful completion of the emphasis requirements and the successful completion of the MEng degree requirements, students will receive a transcript notation from the Faculty Graduate Studies office (subject to Prof. Hofmann’s recommendation).

Emphasis: Analytics (MEng only)

To be admitted to the emphasis in Analytics, MEng students must first successfully complete a prerequisite course APS1070H (0.5 full-course equivalent [FCE]).

Subsequently, to earn the emphasis, students must successfully complete four additional half courses (2.0 FCEs) from the list of core courses or elective courses. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Students must have completed the prerequisite course APS1070H before taking any of the core courses.

Prerequisite Course

APS1070H Foundations of Data Analytics and Machine Learning.

Core Courses

CHE1147H Data Mining in Engineering
ECE1513H Introduction to Machine Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1504H)
MIE1624H Introduction to Data Science and Analytics
MSE1065H Application of Artificial Intelligence in Materials Design (exclusion: MSE1063H).

Elective Courses

CIV1504H, CIV1506H, CIV1507H, CIV1532H, CIV1538H,
ECE537H, ECE1504H (exclusions: CSC411H, CSC2515H,
ECE421H, ECE521H, ECE1513H), ECE1505H, ECE1510H,
CE1657H, ECE1778H, ECE1779H,
MIE562H, MIE1413H, MIE1501H, MIE1512H, MIE1513H,
MIE1517H, MIE1620H, MIE1621H, MIE1622H, MIE1623H,
MIE1628H, MIE1653H, MIE1721H, MIE1723H, MIE1727H,
MSE1063H (exclusion: MSE1065H).

Emphasis: Biomanufacturing (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:

CHE1123H, CHE1125H, CHE1133H, CHE1134H, CHE1135H,
CHE1334H, CHE1471H,
JCC1313H,
JTC1331H,
BME1459H, BME1480H.

Students may double-count one course at most towards any MSE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APPS101H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APPS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMGS2020H.
Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)’s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.

Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcript should contact the Faculty Graduate Studies office.

Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

Leadership


Entrepreneurship and Innovation


Finance and Management


Engineering and Society

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE1031H Forensic Engineering.

Elective Courses


Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from either of the following lists below.
- A thesis towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- Four half courses (2.0 FCEs) from either of the following lists below, including at least one core course (0.5 FCE).

Core Courses

APS1032H *Introduction to Energy Project Management*
MIE515H *Alternative Energy Systems*
MIE1120H *Current Energy Infrastructure and Resources*.

Elective Courses


Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.
MSE: Materials Science and Engineering
MASc, MEng, PhD Courses

A schedule is available on the MSE website at the beginning of the Fall session, listing the time and room location for each course offered in MSE in both the Fall and Winter sessions.

Not all courses are offered every year. Please consult the department for a listing of courses being offered this year.

All students wishing to undertake graduate research in the Department of Materials Science and Engineering must successfully complete a two-day intensive occupational health and safety training program which will normally take place during the week immediately preceding the commencement of graduate courses. More details concerning this course will be provided by the Coordinator of Graduate Studies once admission to a graduate program has been confirmed.

After the initial safety training, all students are required to pass refresher safety training annually.

Materials Science

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MSE1000H</td>
<td>Graduate Research Seminar MASc</td>
</tr>
<tr>
<td>MSE1004H</td>
<td>Extractive Metallurgy</td>
</tr>
<tr>
<td>MSE1015H</td>
<td>Mechanical Properties of Solids I</td>
</tr>
<tr>
<td>MSE1022H</td>
<td>Special Topics in Materials Science I</td>
</tr>
<tr>
<td>MSE1023H</td>
<td>Special Topics in Materials Science II</td>
</tr>
<tr>
<td>MSE1024H</td>
<td>Interface and Nanophase Engineering</td>
</tr>
<tr>
<td>MSE1026H</td>
<td>Analytical Electron Microscopy</td>
</tr>
<tr>
<td>MSE1028H</td>
<td>Advanced Materials Science</td>
</tr>
<tr>
<td>MSE1031H</td>
<td>Forensic Engineering</td>
</tr>
<tr>
<td>MSE1032H</td>
<td>Polymers and Composites Engineering (exclusion: MSE432H)</td>
</tr>
<tr>
<td>MSE1034H</td>
<td>Directed Readings in Materials Science and Engineering I</td>
</tr>
<tr>
<td>MSE1035H</td>
<td>Optical and Photonic Materials</td>
</tr>
<tr>
<td>MSE1036H</td>
<td>Application of Electrochemical Techniques in Materials Science</td>
</tr>
<tr>
<td>MSE1037H</td>
<td>Process Metallurgy of Iron and Steel</td>
</tr>
<tr>
<td>MSE1038H</td>
<td>Computational Materials Design</td>
</tr>
<tr>
<td>MSE1043H</td>
<td>Composite Materials Engineering (exclusion: MSE432H)</td>
</tr>
<tr>
<td>MSE1044H</td>
<td>Directed Readings in Materials Science and Engineering II</td>
</tr>
<tr>
<td>MSE1051H</td>
<td>Advanced Physical Properties of Structural Nanomaterials</td>
</tr>
<tr>
<td>MSE1058H</td>
<td>Nanotechnology in Alternate Energy Systems</td>
</tr>
<tr>
<td>MSE1061H</td>
<td>Engineered Ceramics</td>
</tr>
<tr>
<td>MSE1062H</td>
<td>Materials Physics</td>
</tr>
<tr>
<td>MSE1063H</td>
<td>Application of Artificial Intelligence in Process Metallurgy (prerequisites: basic knowledge of R and Python; exclusion: MSE1065H)</td>
</tr>
<tr>
<td>MSE1064H</td>
<td>Extraction, Production, and Processing of Aluminum</td>
</tr>
<tr>
<td>MSE1065H</td>
<td>Application of Artificial Intelligence in Materials Design (prerequisites: basic knowledge of R and Python and materials science; exclusion: MSE1063H)</td>
</tr>
<tr>
<td>MSE1066H</td>
<td>Practical Aspects of Electron Microscopy</td>
</tr>
<tr>
<td>MSE1067H</td>
<td>Damage and Failure of Advanced Engineering Materials (prerequisites: basic knowledge of materials science, mechanics of materials, and fracture mechanics)</td>
</tr>
<tr>
<td>MSE1068H</td>
<td>Additive Manufacturing of Metals, Ceramics, and Composites (prerequisites: basic knowledge of materials science, especially phase transformation and mechanical behaviour of materials)</td>
</tr>
<tr>
<td>MSE2000H</td>
<td>Graduate Research Seminar PhD</td>
</tr>
<tr>
<td>MSE3000Y</td>
<td>MEng Project</td>
</tr>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
</tr>
<tr>
<td>JMB1050H</td>
<td>Biological and Bio-inspired Materials</td>
</tr>
<tr>
<td>JMZ1704H</td>
<td>Polymer Process Engineering</td>
</tr>
<tr>
<td>JTC1020H</td>
<td>Ceramics</td>
</tr>
<tr>
<td>JTC1135H</td>
<td>Applied Surface Chemistry</td>
</tr>
</tbody>
</table>

0 Course that may continue over a program. The course is graded when completed.
Financial engineering is one of the fastest-growing areas of applied mathematics.

In the MMF program, students reshape their existing analytical abilities with the help of senior academics in mathematics, computer science, statistics, and engineering who have experience with the tools of mathematical finance. This cross-disciplinary approach develops graduates with a richer, more innovative approach to applied mathematics in real-world situations. Some of the faculty are seasoned practitioners from the financial industry while others are from leading firms in the financial software industry, developing applications around requirements like risk management, portfolio analysis, and the pricing of advanced derivatives.

The heart of the program is the four-month internship or campus project. Working on real financial projects, students learn to integrate and apply theoretical knowledge gained earlier in the program. In the internship, students team with employees of the sponsoring firm to experience how financial mathematics impacts the decision-making processes of a financial services organization.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the graduate unit’s additional admission requirements stated below.
- Applicants must have an appropriate bachelor’s degree in a quantitative, technical discipline with a minimum of a mid-B standing in the final two years.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction was not English must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with minimum scores as follows:
  - paper-based TOEFL exam: 580 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 93/120 and 22/30 on the writing and speaking sections
- Applicants must also show evidence of strong mathematical ability. Appropriate workplace experience will be considered in lieu of formal education.
- Admission to the program is competitive. Those accepted into the program will normally have achieved a standing considerably higher than the minimum mid-B standing or have demonstrated exceptional ability through appropriate workplace experience.
- Applicants must satisfy the Admissions Committee of their ability to do rigorous quantitative analysis at an advanced level. The broad background required for this program makes it likely that many strong applicants will not possess all the background requirements. It is expected that applicants will have extra depth in certain areas and need to do additional work in others. Admission may be conditional upon the applicant’s satisfactory completion of the required background material.
Applicants should submit a written statement of approximately 300 words outlining their objectives for entering the program. Applicants should also explain how their background is appropriate. An interview may be required.

Inquiries about part-time options for the program should be addressed to the Program Director.

Program Requirements

- The program of study begins in mid-August and includes a four-month internship during the second session. Students will be responsible for obtaining their own internship. In cases where the student is taking a leave of absence from an appropriate job, it is expected that the student will return to this job for the internship. In all cases, the Director must approve the placement.
- Students will proceed through the program as a group, following a common course of study. The course of study will be fully integrated and computer-laboratory intensive. Course projects and assignments will be designed to integrate the material learned from a variety of the courses and to utilize it in a practical context. Excellent communication and presentation skills will be emphasized in both the oral and written components of the projects.
- Students must complete all courses listed below.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Mathematical Finance: Mathematical Finance MMF Courses

Courses are offered in modules. A module will consist of a four-week unit with a minimum of three contact hours per week, or its equivalent. A large portion of the learning for the module will take place outside of class through carefully designed computer projects and group study. The courses have been packaged in units of one, two, three, four, or five modules, and the course weight will be equal to the number of modules; for example, a course with three modules will have a weight of three credit hours. Six modules will be considered the equivalent of one full-course equivalent in a standard format. The third digit of the four-digit course number determines the course weight.

Third Digit Notation

1 = one-third of a half course
2 = two-thirds of a half course
3 = one half course
4 = two-thirds of a full course
5 = one full course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMF1900Y</td>
<td>Internship (Credit/No Credit)</td>
</tr>
<tr>
<td>MMF1910H</td>
<td>Introduction to Financial Industry (Credit/No Credit)</td>
</tr>
<tr>
<td>MMF1914H</td>
<td>Information Technology (Credit/No Credit)</td>
</tr>
<tr>
<td>MMF1915H</td>
<td>Introduction of Financial Products (Credit/No Credit)</td>
</tr>
<tr>
<td>MMF1920H</td>
<td>Investment and Finance</td>
</tr>
<tr>
<td>MMF1921H</td>
<td>Operations Research</td>
</tr>
<tr>
<td>MMF1922H</td>
<td>Data Science Methods for Investment, Finance, and Risk Management</td>
</tr>
<tr>
<td>MMF1923H</td>
<td>Financial Markets and Corporate Policy</td>
</tr>
<tr>
<td>MMF1926H</td>
<td>Workshop in Mathematical Finance</td>
</tr>
<tr>
<td>MMF1927H</td>
<td>Workshop in Mathematical Finance</td>
</tr>
<tr>
<td>MMF1928H</td>
<td>Pricing Theory 1</td>
</tr>
<tr>
<td>MMF1929H</td>
<td>Asset Management</td>
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<tr>
<td>MMF1941H</td>
<td>Stochastic Analysis</td>
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<tr>
<td>MMF1943Y</td>
<td>Communication</td>
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<td>MMF2000H</td>
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<td>MMF2012H</td>
<td>Financial Modelling</td>
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<tr>
<td>MMF2021H</td>
<td>Numerical Methods for Finance</td>
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<td>MMF2025H</td>
<td>Risk Management Laboratory</td>
</tr>
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<td>MMF2028H</td>
<td>Blockchain Fundamentals for Finance</td>
</tr>
<tr>
<td>MMF2030H</td>
<td>Machine Learning for Finance</td>
</tr>
<tr>
<td>MMF2032H</td>
<td>Innovation and Entrepreneurship</td>
</tr>
</tbody>
</table>

0 Course that may continue over a program. The course is graded when completed.
Mathematics

Mathematics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Mathematics

MSc and PhD

Overview

The Department of Mathematics is a distinguished Faculty of more than 60 mathematicians, offering research opportunities in the areas of pure mathematics and applied mathematics. Faculty areas of research include, but are not limited to, real and complex analysis, ordinary and partial differential equations, harmonic analysis, nonlinear analysis, several complex variables, functional analysis, operator theory, C*-algebras, ergodic theory, group theory, analytic and algebraic number theory, Lie groups and Lie algebras, automorphic forms, commutative algebra, algebraic geometry, singularity theory, differential geometry, symplectic geometry, classical synthetic geometry, algebraic topology, set theory, set-theoretic topology, mathematical physics, fluid mechanics, probability, combinatorics, optimization, control theory, dynamical systems, computer algebra, cryptography, and mathematical finance.

Contact and Address

Web: www.math.toronto.edu/cms
Email: gradinfo@math.toronto.edu
Telephone: (416) 978-7894
Fax: (416) 978-4107

Department of Mathematics
University of Toronto
Room 6290, 40 St. George Street
Toronto, Ontario M5S 2E4
Canada

Mathematics: Graduate Faculty

Full Members

Alexakis, Spyridon - BA, PhD
Arthur, James - BSc, MSc, PhD
Bar-Natan, Dror - BSc, PhD
Bierstone, Edward - BSc, MA, PhD
Binder, Ilia - PhD
Bland, John - BSc, MSc, PhD
Braverman, Alexander - BSc, PhD
Burchard, Almut - MS, PhD (Associate Chair - Graduate)
Collinder, James - BA, MS, PhD
Elliott, George - BSc, MSc, PhD
Friedlander, John - BSc, BS, MA, PhD
Goldstein, Michael - BA, MMath, ScD, PhD
Graham, Ian - BSc, ScD
Guaitieri, Marco - BSc, DPhil
Herzig, Florian - BA, PhD
Ivrii, Victor - MA, PhD, DSc
Jeffrey, Lisa - BA, MA, PhD
Jerrard, Robert - AB, PhD
Kamnitzer, Joel - BMath, PhD
Kapovich, Vitali - BS, PhD
Karshon, Yael - PhD
Khanin, Konstantin - PhD
Khesin, Boris - MS, PhD
Khovanski, Askold - MS, PhD, DSc
Kim, Henry - BSc, PhD
Kudla, Stephen - BA, MA, PhD
Marcolli, Matilde - MS, PhD
McCann, Robert - BS, PhD
Meinrenken, Eckhard - PhD
Milman, Pierre - MA, PhD
Murnaghan, Fiona - BSc, MSc, PhD
Murty, Vijayakumar - BSc, PhD
Nabutovsky, Alexander - MSc, PhD
Nachman, Adrian - BSc, MA, PhD
Panchenko, Dmitry - MSc, PhD
Pugh, Mary - BA, MS, PhD
Quastel, Jeremy - BSc, MS, PhD
Rafi, Kasra - BSc, PhD
Repka, Joe - BSc, PhD
Rosenthal, Jeffrey - BSc, AM, PhD, FRSC
Rotman, Regina - BA, PhD
Scherk, John - BSc, MSc, DPhil
Seco, Luis - PhD
Selick, Paul - BSc, MSc, PhD
Sigal, Israel Michael - BA, PhD
Sulem, Catherine - MMath, PhD
Tanny, Stephen - BSc, PhD
Todorcevic, Stevo - PhD
Tsimerman, Jacob - BSc, PhD
Virag, Balint - BA, MA, PhD
Weiss, William - BSc, MSc, PhD
Yampolsky, Michael - DPhil
Yuen, Henry - PhD
Zhang, Ke - BS, PhD

Members Emeriti

Akcoglu, Mustafa - MSc, PhD
Andrews, David - BSc, MSc, PhD
Bloom, Thomas - BSc, MA, PhD
Davis, H. Chandler - BS, MA, PhD
Ellers, Erich - DrRerNat, DrRerNat
Halperin, J. Stephen - BSc, MSc, PhD, FRSC
Haque, Wahidul - MA, MS, PhD
Jurdjevic, Velimir - BS, MS, PhD
Kupka, Ivan - BSc, PhD, PhD
McCool, James - BSc, PhD
Murasugi, Kunio - BSc, DSc
Sen, Dipak - MSc, DSc
Sharpe, Richard - BSc, MA, PhD
Smith, Stuart - BSc, PhD
Tall, Franklin - AB, PhD
Associate Members

Aretakis, Stefanos - MA, PhD  
De Simoi, Jacopo - PhD  
Dimitrov, Vesselin - MS, PhD  
Farah, Iljas - PhD  
Groechenig, Michael - BSc, PhD  
Kupers, Alexander - BSc, MSC, PhD  
Liokumovich, Yevgeny - BSc, MSC, PhD  
Pusateri, Fabio Giuseppe - BS, MS, PhD  
Rossman, Benjamin - BA, MA, PhD  
Serkh, Kirill - BS, MS, PhD  
Shankar, Arul - BSc, PhD  
Tiozzo, Giulio - BA, MA, PhD  
Varma, Ila - BS, MSC, PhD  
Yu, Yun William - BA, MPH, MRes, PhD  
Zaman, Asif Ali - BSc, MSc, PhD

Mathematics: Mathematics MSc

Master of Science

Program Description

The MSc is a research-oriented program. Opportunities for graduate study and research are available in most of the main areas of pure and applied mathematics. There is a large selection of graduate courses and seminars, a diverse student body of domestic and international students, and yet classes are small and the ratio of graduate students to faculty is low.

Many recent graduates are engaged in university teaching, and a significant number hold administrative positions in universities or in the professional communities. Others are pursuing careers in industry (technological or financial) or in government.

The MSc program is offered:

- for students with a complete undergraduate background in mathematics:
  - 12 months full-time
  - 24 months part-time
- for students who do not have a complete undergraduate background in mathematics. This option is not available on a part-time basis:
  - 16 months full-time
  - 24 months full-time

Provisional admission to the PhD program may be granted at the time of admission to the master's program.

MSc Program (12-Month Full-Time and 24-Month Part-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mathematics’ additional admission requirements stated below.
- Evidence of an excellent academic background and mathematical ability.

Program Requirements

- Students must complete the program in one of two ways:
  - 3.0 approved full-course equivalents (FCEs) and a supervised research project (MAT4000Y), or its equivalent, or
  - 2.0 approved FCEs and an acceptable thesis. Two approved half-year courses are considered the equivalent of a full-year course.
- With approval, two prerequisite undergraduate half courses can be substituted for 0.5 graduate FCE.
- Students may, with approval, take courses outside the department as part of a coherent program.
- Students who undertake the MSc part-time must, at a minimum, satisfy the requirements of the 12-month program.
- Students who plan to continue to the PhD program may select 2.0 FCEs in core courses from the approved list in the PhD program requirements section. Students who obtain a grade of A– or higher in each of the corresponding core courses may count coursework towards the PhD comprehensive examination requirement in the particular subject areas.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);  
6 sessions part-time

Time Limit

3 years full-time;  
6 years part-time

MSc Program (16-Month Full-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mathematics’ additional admission requirements stated below.
- Evidence of an excellent academic background and mathematical ability.
- Students who do not have a complete undergraduate background in mathematics may be accepted into the 16-month program. This possibility may interest students who have some background in a subject in which mathematics is applied and/or who are interested in industrial applications of mathematics.
Program Requirements

• Students must complete the program full-time in one of two ways:
  o 3.0 approved full-course equivalents (FCEs) and a supervised research project (MAT4000Y), or its equivalent, or
  o 2.0 approved FCEs and an acceptable thesis. Two approved half-year courses are considered the equivalent of a full-year course.
• Students must also complete an approved selection of prerequisites and other courses: an additional 2.0 FCEs in Year 2, 3, or 4 undergraduate courses in any of the following subjects: algebra, analysis, partial differential equations, probability, and topology.
• With approval, two prerequisite undergraduate half courses can be substituted for 0.5 graduate FCE.
• Students may, with approval, take courses outside the department as part of a coherent program.
• Students who plan to continue to the PhD program may select 2.0 FCEs in core courses from the approved list in the PhD program requirements section. Students who obtain a grade of A– or higher in each of the corresponding core courses may count coursework towards the PhD comprehensive examination requirement in the particular subject areas.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F)

Time Limit

3 years full-time

MSc Program (24-Month Full-Time)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mathematics’ additional admission requirements stated below.
• Evidence of an excellent academic background and mathematical ability.
• Students who do not have a complete undergraduate background in mathematics may be accepted into the 24-month program. This possibility may interest students who have some background in a subject in which mathematics is applied and/or who are interested in industrial applications of mathematics.

Program Requirements

• Students must complete the program full-time in one of two ways:
  o 3.0 approved full-course equivalents (FCEs) and a supervised research project (MAT4000Y), or its equivalent, or
  o 2.0 approved FCEs and an acceptable thesis. Two approved half-year courses are considered the equivalent of a full-year course.
• Students must also complete an approved selection of prerequisites and other courses: an additional 3.0 FCEs in Year 2, 3, or 4 undergraduate courses in any of the following subjects: algebra, analysis, partial differential equations, probability, and topology.
• With approval, two prerequisite undergraduate half courses can be substituted for 0.5 graduate FCE.
• Students may, with approval, take courses outside the department as part of a coherent program.
• Students who plan to continue to the PhD program may select 2.0 FCEs in core courses from the approved list in the PhD program requirements section. Students who obtain a grade of A– or higher in each of the corresponding core courses may count coursework towards the PhD comprehensive examination requirement in the particular subject areas.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Mathematics: Mathematics PhD

Doctor of Philosophy

Program Description

The PhD is a research-oriented program consisting of coursework, comprehensive examinations, and a thesis embodying the results of original research. Opportunities for graduate study and research are available in most of the main areas of pure and applied mathematics.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate MA or 2) direct entry following completion of a bachelor’s degree.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mathematics’ additional admission requirements stated below.
A master's degree from a recognized university. Students must satisfy the department of their ability to do independent research at an advanced level. They must show evidence of an excellent academic background and mathematical ability.

Program Requirements

**Coursework.** Students must successfully complete at least 3.0 full-course equivalents (FCEs). Out of the following 12 core courses, students must complete 6 courses.

### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT1000H</td>
<td>Real Analysis I</td>
</tr>
<tr>
<td>MAT1001H</td>
<td>Real Analysis II</td>
</tr>
<tr>
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<td>Complex Analysis</td>
</tr>
<tr>
<td>MAT1060H</td>
<td>Partial Differential Equations I</td>
</tr>
<tr>
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</tr>
<tr>
<td>MAT1100H</td>
<td>Algebra I</td>
</tr>
<tr>
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</tr>
<tr>
<td>MAT1300H</td>
<td>Topology I</td>
</tr>
<tr>
<td>MAT1301H</td>
<td>Topology II</td>
</tr>
<tr>
<td>MAT1600H</td>
<td>Mathematical Probability I</td>
</tr>
<tr>
<td>MAT1601H</td>
<td>Mathematical Probability II</td>
</tr>
<tr>
<td>MAT1850H</td>
<td>Linear Algebra and Optimization</td>
</tr>
</tbody>
</table>

- **Comprehensive examinations.**
  - Students must pass comprehensive examinations in basic mathematics before beginning an area of research. These examinations are scheduled at the start of the Fall session (usually September) and should be taken no later than the start of the third session.
  - Students who obtain a grade of A– or higher in each of the corresponding core courses for the general areas of mathematics will be exempted from the comprehensive examination requirement in the specific area of study.
- Students must pass a **qualifying oral examination** or give a seminar presentation in their particular area of study before embarking on serious thesis research.
- The main requirement of the degree is an acceptable **thesis** embodying original research of a standard that warrants publication in the research literature.

### Program Length

4 years

### Time Limit

6 years

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**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mathematics’ additional admission requirements stated below.
- Exceptionally strong BSc students with a grade point average (GPA) of 3.7 or higher may apply for direct admission to the PhD program. Students must satisfy the department of their ability to do independent research at an advanced level. They must show evidence of an excellent academic background and mathematical ability.

Program Requirements

- **Coursework.** Students must complete at least 4.0 full-course equivalents (FCEs). Out of the following 12 core courses, students must complete 6 courses (3.0 FCEs). Students must also complete 1.0 elective FCE.

### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>MAT1000H</td>
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<tr>
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<td>Partial Differential Equations I</td>
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<td>MAT1100H</td>
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<td>Topology I</td>
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</tr>
<tr>
<td>MAT1850H</td>
<td>Linear Algebra and Optimization</td>
</tr>
</tbody>
</table>

- Students must complete MAT4000Y+ **Supervised Research Project** (1.0 FCE) or its equivalent.
- **Comprehensive examinations.**
  - Students must pass comprehensive examinations in basic mathematics before beginning an area of research. These examinations are scheduled at the start of the Fall session (usually September) and should be taken no later than the start of the third session.
  - Students who obtain a grade of A– or higher in each of the corresponding core courses for the general areas of mathematics will be exempted from the comprehensive examination requirement in the specific area of study.
- Students must pass a **qualifying oral examination** or give a seminar presentation in their particular area of study before embarking on serious thesis research.
- The main requirement of the degree is an acceptable **thesis** embodying original research of a standard that warrants publication in the research literature.
Program Length
5 years

Time Limit
7 years

Mathematics: Mathematics MSc, PhD Courses

Each year the department offers a selection of courses chosen from the following list, with the possibility of further additions. The courses MAT1000H, 1001H, 1100H, 1101H, 1300H, 1301H, 1600H, and 1601H will be offered each year; the complete list of courses is available from the department. In addition, it may be possible for a student to arrange to take one of the listed courses as an individual reading course. Students should consult the office of the coordinator at the beginning of the academic year.

PhD students are expected to attend and contribute to seminars in the research areas.

<table>
<thead>
<tr>
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<tr>
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<tr>
<td>MAT1002H</td>
<td>Complex Analysis</td>
</tr>
<tr>
<td>MAT1004H</td>
<td>Theory of Approximation</td>
</tr>
<tr>
<td>MAT1005H</td>
<td>Fourier Analysis</td>
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<tr>
<td>MAT1006H</td>
<td>Topics in Real Analysis</td>
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<td>MAT1007H</td>
<td>Topics in Complex Variables</td>
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<tr>
<td>MAT1008H</td>
<td>Functions of a Complex Variable</td>
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<tr>
<td>MAT1010H</td>
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<tr>
<td>MAT1011H</td>
<td>Introduction to Linear Operators</td>
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<tr>
<td>MAT1012H</td>
<td>Real Analysis II</td>
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<tr>
<td>MAT1013H</td>
<td>Theory of Several Complex Variables II</td>
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<td>MAT1015H</td>
<td>Topics in Operator Theory</td>
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<td>MAT1016Y</td>
<td>Topics in Operator Algebras</td>
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<td>MAT1017H</td>
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<td>MAT1034H</td>
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<td>MAT1037H</td>
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<td>MAT1045H</td>
<td>Topics in Ergodic Theory</td>
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<tr>
<td>MAT1051H</td>
<td>Introduction to Ordinary Differential Equations</td>
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<td>MAT1052H</td>
<td>Topics in Ordinary Differential Equations</td>
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<td>MAT1060H</td>
<td>Partial Differential Equations I</td>
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<td>MAT1061H</td>
<td>Partial Differential Equations II</td>
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<td>MAT1062H</td>
<td>Topics in Partial Differential Equations I</td>
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<td>MAT1100H</td>
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<td>MAT1104H</td>
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<td>MAT1110H</td>
<td>Algebraic Groups</td>
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<td>MAT1120H</td>
<td>Lie Groups and Lie Algebras I</td>
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<td>MAT1122H</td>
<td>Lie Groups and Representations I</td>
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<td>MAT1126H</td>
<td>Lie Groups and Fluid Dynamics</td>
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<td>MAT1128H</td>
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<td>MAT1155H</td>
<td>Commutative Algebra</td>
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<td>Algebraic Geometry</td>
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<td>MAT1191H</td>
<td>Topics in Algebraic Geometry</td>
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<td>MAT1192H</td>
<td>Advanced Topics in Algebraic Geometry</td>
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<td>Automorphic Forms and Representation Theory I</td>
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<td>MAT1198H</td>
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<td>Algebraic Number Theory</td>
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<td>MAT1202H</td>
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<td>Computational Aspects of Number Theory</td>
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<td>MAT1301H</td>
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<td>MAT1302H</td>
<td>Combinatorial Methods</td>
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<td>Combinatorial Designs</td>
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<td>MAT1304H</td>
<td>Topics in Combinatorics</td>
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<tr>
<td>MAT1305H</td>
<td>Topics in Geometric Topology</td>
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<td>MAT1306H</td>
<td>The Discrete Mathematics Toolkit</td>
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<tr>
<td>MAT1309H</td>
<td>Geometrical Inequalities</td>
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<td>MAT1312H</td>
<td>Topics in Geometry</td>
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<td>MAT1313Y</td>
<td>Seminar in Geometry</td>
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<td>MAT1314H</td>
<td>Introduction to Noncommutative Geometry</td>
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<td>MAT1318H</td>
<td>Seminar in Geometry and Topology</td>
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<td>MAT1341H</td>
<td>Topics in Differential Geometry</td>
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<td>MAT1342H</td>
<td>Introduction to Differential Geometry</td>
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<td>MAT1343H</td>
<td>Riemannian Manifolds</td>
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<td>MAT1344H</td>
<td>Symplectic Geometry</td>
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<td>MAT1346H</td>
<td>Homotopy Theory</td>
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<td>MAT1347H</td>
<td>Topics in Symplectic Geometry and Topology</td>
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<td>MAT1351H</td>
<td>Topics in Homotopy Theory</td>
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<td>MAT1355H</td>
<td>Singularity Theory</td>
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<tr>
<td>MAT1359H</td>
<td>Moduli Spaces of Flat Connections</td>
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<tr>
<td>MAT1360H</td>
<td>Complex Manifolds</td>
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<td>MAT1392H</td>
<td>Algebra Seminar</td>
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<td>MAT1399H</td>
<td>Advanced Point Set Topology</td>
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<tr>
<td>MAT1403H</td>
<td>Model Theory</td>
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<tr>
<td>MAT1404H</td>
<td>Introduction to Model Theory and Set Theory</td>
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<tr>
<td>MAT1430H</td>
<td>Set Theory</td>
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<tr>
<td>MAT1435H</td>
<td>Topics in Set Theory</td>
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<tr>
<td>MAT1436H</td>
<td>Large Cardinals, Structure Theory of Ideals, and Applications (prerequisites: MAT309H or MAT409H)</td>
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<tr>
<td>MAT1449H</td>
<td>Seminar in Foundations</td>
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<tr>
<td>MAT1498H</td>
<td>Communicating Mathematics to a General Audience (Credit/No Credit)</td>
</tr>
<tr>
<td>MAT1499H</td>
<td>Teaching Large Mathematics Courses (Credit/No Credit)</td>
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**Applied Mathematics**

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<tr>
<td>MAT1500Y</td>
<td>Applied Analysis</td>
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<tr>
<td>MAT1502H</td>
<td>Topics in Geometric Analysis</td>
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<tr>
<td>MAT1507H</td>
<td>Asymptotic and Perturbation Methods</td>
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<tr>
<td>MAT1508H</td>
<td>Techniques of Applied Mathematics</td>
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<tr>
<td>MAT1509H</td>
<td>Mathematical and Computational Linguistics</td>
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<tr>
<td>MAT1520H</td>
<td>Wave Propagation</td>
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<tr>
<td>MAT1525H</td>
<td>Topics in Inverse Problems and Image Analysis</td>
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<tr>
<td>MAT1525Y</td>
<td>Inverse Problems of X-Ray and Radar Imaging</td>
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<tr>
<td>MAT1600H</td>
<td>Mathematical Probability I</td>
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<td>MAT1601H</td>
<td>Mathematical Probability II</td>
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<td>MAT1638H</td>
<td>Fluid Mechanics</td>
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<td>MAT1639Y</td>
<td>Topics in Fluid Mechanics</td>
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<tr>
<td>MAT1700H</td>
<td>General Relativity</td>
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<td>MAT1710H</td>
<td>Group Theory and Quantum Mechanics</td>
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<td>MAT1722H</td>
<td>C* Algebras and Quantum Mechanics</td>
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<td>MAT1723H</td>
<td>Foundations of Quantum Mechanics</td>
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<tr>
<td>MAT1724H</td>
<td>Functional Analysis in Quantum Mechanics</td>
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<tr>
<td>MAT1725Y</td>
<td>Scattering Theory</td>
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<td>MAT1739H</td>
<td>Topics in Mathematical Physics</td>
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<tr>
<td>MAT1750H</td>
<td>Computational Mathematics</td>
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<tr>
<td>MAT1751H</td>
<td>Quantum Computing, Foundations to Frontier</td>
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<tr>
<td>MAT1760H</td>
<td>Computer Algebra</td>
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<td>MAT1761H</td>
<td>Algorithms in Algebraic Geometry</td>
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<tr>
<td>MAT1800H</td>
<td>Methods of Applied Mathematics I</td>
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<tr>
<td>MAT1801H</td>
<td>Methods of Applied Mathematics II</td>
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<td>MAT1839H</td>
<td>Integral Equation Methods for the Numerical Solution of PDEs</td>
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<td>MAT1840H</td>
<td>Control Theory</td>
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<td>MAT1841H</td>
<td>Mathematics of Massive Data Analysis: Fundamentals and Applications</td>
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<td>MAT1845H</td>
<td>Dynamical Systems</td>
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<td>MAT1847H</td>
<td>Holomorphic Dynamics</td>
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<td>MAT1850H</td>
<td>Linear Algebra and Optimization</td>
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<tr>
<td>MAT1855H</td>
<td>Mathematical Problems in Economics</td>
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<td>MAT1856H</td>
<td>Mathematical Finance</td>
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<td>MAT1880H</td>
<td>Case Studies in Applied Mathematics</td>
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**Individual Reading Courses**

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<th>Course Title</th>
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<tr>
<td>MAT1900Y</td>
<td>Readings in Pure Mathematics</td>
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<td>MAT1901H</td>
<td>Readings in Pure Mathematics</td>
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<td>MAT1902H</td>
<td>Readings in Pure Mathematics</td>
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<td>MAT1950Y</td>
<td>Readings in Applied Mathematics</td>
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<tr>
<td>MAT1951H</td>
<td>Readings in Applied Mathematics</td>
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<td>MAT2001H</td>
<td>Readings in Theoretical Mathematics I</td>
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<td>MAT2002H</td>
<td>Readings in Theoretical Mathematics II</td>
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**Seminars**

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<tr>
<td>MAT3001H</td>
<td>Seminar in Pure Mathematics (Credit/No Credit)</td>
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<tr>
<td>MAT3002H</td>
<td>Seminar in Applied Mathematics (Credit/No Credit)</td>
</tr>
<tr>
<td>MAT4000Y*</td>
<td>Supervised Research Project</td>
</tr>
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</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Mechanical and Industrial Engineering

MIE: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Mechanical and Industrial Engineering

MASc

- Emphases:
  - Robotics;
  - Sustainable Energy

MEng

- Emphases:
  - Advanced Manufacturing;
  - Advanced Soft Materials;
  - Analytics;
  - Biomanufacturing;
  - Engineering and Globalization;
  - Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE);
  - Forensic Engineering;
  - Robotics;
  - Sustainable Energy

- Dual Degree Program:
  - BEng (South China University of Technology) / MEng (University of Toronto)

PhD

- Emphases:
  - Robotics;
  - Sustainable Energy

Collaborative Specializations

- Biomedical Engineering
  - Mechanical and Industrial Engineering, MASc, PhD
- Engineering Education
  - Mechanical and Industrial Engineering, MASc, PhD
- Knowledge Media Design
  - Mechanical and Industrial Engineering, MASc, MEng, PhD
- Psychology and Engineering
  - Mechanical and Industrial Engineering, MASc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Mechanical and Industrial Engineering, MASc, MEng, PhD

Overview

The Department of Mechanical and Industrial Engineering accepts qualified applicants for study in a wide range of topics, spanning the breadth of mechanical and industrial engineering, including advanced manufacturing and materials engineering; applied mechanics and design; biomedical engineering; energy and environmental engineering; robotics, mechatronics and instrumentation; thermal and fluid sciences engineering; human factors/ergonomics; information engineering; and operations research.

Contact and Address

Web: [www.mie.utoronto.ca/contact-us/](http://www.mie.utoronto.ca/contact-us/)
Email: gradoffice@mie.utoronto.ca
Telephone: (416) 978-2805

Department of Mechanical and Industrial Engineering
University of Toronto
Mechanical Engineering Building
5 King's College Road
Toronto, Ontario M5S 3G8
Canada

Mechanical and Industrial Engineering: Graduate Faculty

Full Members

Aleman, Dionne - BSc, MSc, PhD
Amon, Cristina - BASc, MSc, ScD
Ashgriz, Nasser - BS, ME, DPhil
Azhari, Faezeh - BEng, PhD
Bazylak, Aimy - PhD
Beck, Chris - BSc, MSc, PhD
Behdinan, Kamran - BASc, BEng, MASc, MSc, PhD, PhD
Ben Mrad, Rida - BSc, PhD
Benhabib, Bensiyon - BSc, MSc, PhD
Bilton, Amy Marlou - BASc, MS, PhD
Bussmann, Markus - BASc, MSc, PhD (Chair and Graduate Chair)
Carter, Michael - BM, MMath, PhD
Chan, Timothy - BSc, PhD
Chandra, Sanjeev - PhD
Chignell, Mark - BSc, PhD
Cohen, Eldan - BSc, PhD
Consens, Mariano - BEng, MSc, PhD
Diller, Eric David - BS, MS, PhD
Dolatabadi, Ali - BS, MASc, PhD
Donmez Akyildiz, Birsen - BS, MS, PhD
Fillater, Tobin - BE, PhD, PhD
Fox, Mark - BSc, PhD

Mechanical and Industrial Engineering: Graduate Faculty
MIE: Mechanical and Industrial Engineering

MASc

Master of Applied Science

Program Description

The MASc degree program provides students with an opportunity to pursue research-intensive advanced studies in a particular field of interest.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering's additional admission requirement stated below.
- Evidence of research ability.

Program Requirements

- At the beginning of each student's program, a professor in the department will be identified as the supervisor who will guide the student in the research program and selection of courses.
- For students with an adequate undergraduate background, the program will normally consist of 2.0 full-course equivalents (FCEs) and a thesis.
- MASc students are required to participate in the non-credit seminar course JDE1000H during their first or second session of registration.
- In Year 1, MASc students are required to attend at least 70% of seminars that are part of the MIE Seminar Series. Students who complete the requirement will receive credit for SRM3333Y MIE Seminar Series for MASc Students.
- Students in the MASc program have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
MIE: Mechanical and Industrial Engineering
MEng

Master of Engineering

Program Description
The MEng degree program is designed for students preparing for advanced professional activity; it is not a research-oriented degree. The program may be taken on a full-time, extended full-time, or part-time basis.

Full-Time Option

Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering’s additional admission requirements stated below.
- A mid-B in the final two years of undergraduate study.

Program Requirements
- **5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project.** A majority of the courses must be either offered by the Department of MIE or from a list (found on the department website) of approved courses deemed equivalent to an MIE course.
- Program completion is possible in three sessions (one year).
- Students in the MEng program have the option of completing an emphasis in Advanced Manufacturing; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; Robotics; or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

Program Length
6 sessions (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years

Extended Full-Time Option

Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering’s additional admission requirement stated below.
- A mid-B in the final two years of undergraduate study.

Program Requirements
- **5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project.** A majority of the courses must be either offered by the Department of MIE or from a list (found on the department website) of approved courses deemed equivalent to an MIE course.

Program Length
6 sessions (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years

Part-Time Option

Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering’s additional admission requirement stated below.
- A mid-B in the final two years of undergraduate study.

Program Requirements
- **5.0 full-course equivalents (FCEs) or 3.5 FCEs plus a supervised project.** A majority of the courses must be either offered by the Department of MIE or from a list (found on the department website) of approved courses deemed equivalent to an MIE course.
• Students are limited to four half courses per year and two half courses per session. Time to completion will be greater than two years.
• Students in the MEng program have the option of completing an emphasis in Advanced Manufacturing; Analytics; Biomanufacturing; Engineering and Globalization; Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE); Forensic Engineering; Robotics; or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

Program Length
9 sessions

Time Limit
6 years

MIE: Mechanical and Industrial Engineering
MEng (Dual Degree: BEng South China University of Technology) / MEng)

Dual Degree Program: Bachelor of Engineering (South China University of Technology) / Master of Engineering (University of Toronto)

Program Description

The MEng may also be taken as part of a dual degree involving the Bachelor of Engineering (BEng) program offered by the South China University of Technology's School of Mechanical and Automotive Engineering (SMAE) and the Master of Engineering program offered by the University of Toronto's Mechanical and Industrial Engineering (MIE) department. Dual degree program students complete the fourth year of their BEng as Visiting International Non-degree Students and receive a conditional offer to the MEng program. See the MEng requirements above.

Upon successful completion of the degree requirements of both programs, students receive a Bachelor of Engineering degree and a Master of Engineering degree.

Contact

Bachelor of Engineering Program
School of Mechanical and Automotive Engineering
South China University of Technology
Email: j2jw@scut.edu.cn

Master of Engineering Program
Department of Mechanical and Industrial Engineering
Faculty of Applied Science and Engineering, University of Toronto

Email: meng.admission@mie.utoronto.ca

Application Process

• This dual degree program allows outstanding third-year students at SMAE to apply to complete their fourth year of undergraduate studies enrolled in MIE as Visiting International Non-degree Students. These students receive a conditional offer of admission into the MEng program for their fifth year.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering's additional admission requirements stated on the department's website.
• In Years 2 and 3 of the BEng program, a minimum 80% average (mid-B). In Year 4, students must maintain a minimum mid-B average until conferral of the BEng degree.

MIE: Mechanical and Industrial Engineering
PhD

Doctor of Philosophy

The PhD degree program is for students anticipating a career in which they will be performing or directing research at the most advanced level.

Students may be admitted to the PhD program via one of three routes: 1) following completion of an appropriate master's degree; 2) transfer from the University of Toronto MASc program; or 3) direct entry following completion of a bachelor's degree.

The Department of Mechanical and Industrial Engineering offers both full-time and flexible-time PhD program options. Applicants must declare the option for which they wish to apply; transfers between these programs are not permitted.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering's additional admission requirements stated below.
• Admission to the PhD program is reserved for those who are able to present evidence of superior academic and research ability. Students may be admitted to the PhD program with an appropriate University of Toronto master's...
degree or its equivalent from a recognized university with a minimum B+ average.

Program Requirements

• At the beginning of each student's program, a professor in the department will be identified as the supervisor and will guide the student in the research program and selection of courses.
• Minimum departmental standards in coursework: completion of 2.5 full-course equivalents (FCEs) plus a thesis.
• Participation in the non-credit seminar course JDE1000H during the first or second session of registration.
• In Years 1 and 2, students must attend at least 70% of seminars that are part of the MIE Seminar Series. Students who complete this requirement will receive credit for SRD4444Y MIE Seminar Series.
• Students must pass a qualifying examination, annual progress meetings, and the SGS Doctoral Final Oral Examination.
• Students must present a research seminar during the final year of their studies.
• Students must be on campus full-time unless special permission is obtained for off-campus study.
• Students in the PhD program have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

Program Length
4 years

Time Limit
6 years

PhD Program (Transfer)

Transfer Requirements

• Admission to the PhD program is reserved for those who are able to present evidence of superior academic and research ability. Very strong MASc students may apply to transfer to the PhD program after completing only one year of the MASc program.

Program Requirements

• At the beginning of each student's program, a professor in the department will be identified as the supervisor and will guide the student in the research program and selection of courses.
• Minimum departmental standards in coursework: completion of 3.5 full-course equivalents (FCEs) plus a thesis.
• Participation in the non-credit seminar course JDE1000H during the first or second session of registration.
• In Years 1 and 2, students must attend at least 70% of seminars that are part of the MIE Seminar Series. Students who complete this requirement will receive credit for SRD4444Y MIE Seminar Series.
• Students must pass a qualifying examination, annual progress meetings, and the SGS Doctoral Final Oral Examination.
• Students must present a research seminar during the final year of their studies.
• Students must be on campus full-time unless special permission is obtained for off-campus study.
• Students in the PhD program have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

Program Length
5 years

Time Limit
7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering's additional admission requirements stated below.
• Admission to the PhD program is reserved for those who are able to present evidence of superior academic and research ability. Exceptionally strong applicants with a bachelor's degree and an appropriate background may apply directly to the PhD program and may be admitted via direct entry. Applicants are advised to consult with the Graduate Coordinator before applying to ensure that they have the appropriate admission requirements for direct entry.

Program Requirements

• At the beginning of each student's program, a professor in the department will be identified as the supervisor and will guide the student in the research program and selection of courses.
• Minimum departmental standards in coursework: completion of 3.5 full-course equivalents (FCEs) plus a thesis.

In Years 1 and 2, students must attend at least 70% of seminars that are part of the MIE Seminar Series. Students who complete this requirement will receive credit for SRD4444Y MIE Seminar Series.

Students must pass a qualifying examination, annual progress meetings, and the SGS Doctoral Final Oral Examination.

Students must present a research seminar during the final year of their studies.

Students must be on campus full-time unless special permission is obtained for off-campus study.

Students in the PhD program have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.

**Program Length**

6 years

**Time Limit**

8 years

**PhD Program (Flexible-Time)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Mechanical and Industrial Engineering's additional admission requirements stated below.
- Admission to a PhD program is reserved for those who are able to present evidence of superior academic and research ability. Students may be admitted to the PhD program with an appropriate University of Toronto master's degree or its equivalent from a recognized university with a minimum B+ average.
- Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option. However, in addition, applicants to the flexible-time PhD option must demonstrate that they are actively engaged in professional activities related to their proposed program of study.

**Program Requirements**

- At the beginning of each student's program, a professor in the department will be identified as the supervisor and will guide the student in the research program and selection of courses.
- Minimum departmental standards in coursework: completion of 2.5 full-course equivalents (FCEs) and a thesis.
- Participation in the non-credit seminar course JDE1000H during their first or second session of registration.
- In Years 1 and 2, students must attend at least 70% of seminars that are part of the MIE Seminar Series. Students who complete this requirement will receive credit for SRD4444Y MIE Seminar Series. Students whose professional background is such that they would be deemed to have fulfilled this breadth requirement may be exempted upon consultation with the admissions committee.
- Students must pass a qualifying examination, annual progress meetings, and the SGS Doctoral Final Oral Examination.
- Students must present a research seminar during the final year of their studies.
- Students in the PhD program have the option of completing an emphasis in Robotics or Sustainable Energy as part of their degree program. Please see details in the Mechanical and Industrial Engineering MASc, MEng, PhD Emphases section.
Emphasis: Advanced Soft Materials (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:


Students may double-count one course at most towards any MIE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Analytics (MEng only)

To be admitted to the emphasis in Analytics, MEng students must first successfully complete a prerequisite course APS1070H (0.5 full-course equivalent [FCE]).

Subsequently, to earn the emphasis, students must successfully complete four additional half courses (2.0 FCEs) from the list of core courses or elective courses. These must include at least one core course; the remaining courses must be selected from the list of elective courses.

Students must have completed the prerequisite course APS1070H before taking any of the core courses.

Prerequisite Course

APS1070H Foundations of Data Analytics and Machine Learning.

Core Courses

ECE1513H Introduction to Machine Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1504H)
MIE1624H Introduction to Data Science and Analytics.

Elective Courses


Emphasis: Biomanufacturing (MEng only)

MEng students must successfully complete any four half courses (2.0 full-course equivalents [FCEs]) from the following list:


Students may double-count one course at most towards any MIE emphasis, or towards any other emphasis in the Faculty.

Emphasis: Engineering and Globalization (MEng only)

MEng students must successfully complete four half courses (2.0 full-course equivalents [FCEs]) from the following lists, with at least two half courses (or one full course) taken from Group A.

Group A

APS510H, APS530H, APS1420H, JCR1000Y (full-year course).

Group B

APS1015H, APS1020H, APS1024H, CHL5700H, CIV1399H, JMG2020H.

Note: Students who choose to pursue an MEng project in their home department that aligns with the Centre for Global Engineering (CGEN)'s disciplinary focus, as deemed by the CGEN Director, may count the project as one required Group B course.

Students who complete the requirements of the emphasis in Engineering and Globalization and wish to obtain a notation on their transcript should contact the Faculty Graduate Studies office.

Emphasis: Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) (MEng only)

MEng students must successfully complete any four of the following courses (2.0 full-course equivalents [FCEs]):

Leadership


Entrepreneurship and Innovation


Finance and Management


Engineering and Society

APS510H, APS1018H, APS1024H, APS1025H, APS1031H, APS1034H, APS1101H, APS1420H.

Emphasis: Forensic Engineering (MEng only)

MEng students must successfully complete four courses (one core course and three elective courses).

Core Course

MSE1031H Forensic Engineering.

Elective Courses


Emphasis: Robotics (MASc, MEng, PhD)

Students must successfully complete four courses (2.0 full-course equivalents [FCEs]) chosen from at least two of the following groups, and no more than two in any given group:

Group 1: Planning and Control


Group 2: Perception and Learning


Group 3: Modelling and Dynamics

AER1503H, AER1512H, AER506H, JEB1444H, MIE1001H.

Group 4: Systems Design and Integration


Emphasis: Sustainable Energy (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least three half courses (1.5 full-course equivalents [FCEs]) from either of the following lists below.
- A thesis towards their degree on a topic related to sustainable energy. Topics must be approved by the steering committee of the Institute of Sustainable Energy. Contact: Mandeep Rayat.

MEng students must successfully complete:

- Four half courses (2.0 FCEs) from either of the following lists below, including at least one core course (0.5 FCE).

Core Courses

APS1032H Introduction to Energy Project Management
MIE515H Alternative Energy Systems
MIE1120H Current Energy Infrastructure and Resources.

Elective Courses

Students who complete the requirements of the emphasis in Sustainable Energy will receive a notation on their transcript from the Faculty Graduate Studies Office following a recommendation from the Institute of Sustainable Energy. Contact: Mandeep Rayat.

**MIE: Mechanical and Industrial Engineering**

**MASc, MEng, PhD Courses**

See the departmental website for a schedule of available courses.

### Fluid Mechanics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIE520H</td>
<td>Biotransport Phenomena</td>
</tr>
<tr>
<td>MIE1201H</td>
<td>Advanced Fluid Mechanics I</td>
</tr>
<tr>
<td>MIE1206H</td>
<td>Non Newtonian Fluid Mechanics</td>
</tr>
<tr>
<td>MIE1207H</td>
<td>Structure of Turbulent Flows</td>
</tr>
<tr>
<td>MIE1208H</td>
<td>Microfluidic Biosensors (prerequisite: undergraduate-level fluidic mechanics)</td>
</tr>
<tr>
<td>MIE1210H</td>
<td>Computational Fluid Mechanics and Heat Transfer</td>
</tr>
<tr>
<td>MIE1212H</td>
<td>Convective Heat Transfer</td>
</tr>
<tr>
<td>MIE1214H</td>
<td>Applied Computational Fluid Dynamics (CFD)</td>
</tr>
<tr>
<td>MIE1222H</td>
<td>Multiphase Flows</td>
</tr>
<tr>
<td>MIE1224H</td>
<td>Heating, Ventilating, and Air Conditioning (HVAC)</td>
</tr>
<tr>
<td>MIE1232H</td>
<td>Microfluidics and Laboratory-on-a-Chip Systems</td>
</tr>
<tr>
<td>MIE1240H</td>
<td>Wind Power</td>
</tr>
<tr>
<td>MIE1241H</td>
<td>Energy Management</td>
</tr>
<tr>
<td>MIE1299H</td>
<td>Special Topics in Fluid Mechanics</td>
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</tbody>
</table>

### Human Factors and Ergonomics

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MIE542H</td>
<td>Human Factors Integration</td>
</tr>
<tr>
<td>MIE1401H</td>
<td>Human Factors Engineering</td>
</tr>
<tr>
<td>MIE1402H</td>
<td>Experimental Methods in Human Factors Research</td>
</tr>
<tr>
<td>MIE1403H</td>
<td>Analytical Methods in Human Factors Research</td>
</tr>
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</table>

### Information Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>JMG2020H</td>
<td>Big Data</td>
</tr>
<tr>
<td>MIE1501H</td>
<td>Knowledge Modelling and Management</td>
</tr>
<tr>
<td>MIE1505H</td>
<td>Enterprise Modelling</td>
</tr>
<tr>
<td>MIE1510H</td>
<td>Formal Techniques in Ontology Engineering</td>
</tr>
<tr>
<td>MIE1512H</td>
<td>Data Analytics</td>
</tr>
<tr>
<td>MIE1513H</td>
<td>Decision Support Systems</td>
</tr>
<tr>
<td>MIE1514H</td>
<td>Systems Design and Engineering: A Product Perspective</td>
</tr>
<tr>
<td>MIE1516H</td>
<td>Structured Learning and Inference</td>
</tr>
<tr>
<td>MIE1517H</td>
<td>Introduction to Deep Learning (prerequisite: APS1070H or equivalent)</td>
</tr>
</tbody>
</table>

### Mechanics and Materials

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MIE517H</td>
<td>Fuel Cell System</td>
</tr>
<tr>
<td>MIE540H</td>
<td>Product Design</td>
</tr>
<tr>
<td>MIE1128H</td>
<td>Materials for Clean Energy Technologies</td>
</tr>
<tr>
<td>MIE1301H</td>
<td>Solid Mechanics</td>
</tr>
<tr>
<td>MIE1303H</td>
<td>Fracture Mechanics</td>
</tr>
<tr>
<td>MIE1359H</td>
<td>Engineering Cell Biology and Micro-Nanoengineered Platforms</td>
</tr>
<tr>
<td>MIE1705H</td>
<td>Thermoplastics Polymer Processing</td>
</tr>
<tr>
<td>MIE1706H</td>
<td>Manufacturing of Cellular and Microcellular Polymers</td>
</tr>
<tr>
<td>MIE1707H</td>
<td>Structure-Property Relationships of Thermoplastic and Composite Foams</td>
</tr>
<tr>
<td>MIE1708H</td>
<td>Collision Reconstruction</td>
</tr>
<tr>
<td>MIE1713H</td>
<td>Analysis and Design of Joints in Manufactured Products</td>
</tr>
<tr>
<td>MIE1715H</td>
<td>Life Cycle Engineering</td>
</tr>
<tr>
<td>MIE1720H</td>
<td>Creativity in Conceptual Design</td>
</tr>
<tr>
<td>MIE1724H</td>
<td>Additive Manufacturing in Engineering Applications</td>
</tr>
</tbody>
</table>

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MIE1725H  Soft Materials and Machines
MIE1732H  Tribology
MIE1740H  Smart Materials and Structures
MIE1742H  Composite Materials Design
MIE1743H  Axiomatic Design Principles for Conceptual and Embodiment Design
MIE1744H  Nanomechanics of Materials
MIE1804H  The Finite Element Method in Mechanical Engineering
MIE1807H  Principles of Measurements

**Mechatronics and Dynamics**

MIE506H  MEMS Design and Microfabrication
MIE1001H  Advanced Dynamics
MIE1005H  Theory of Vibrations
MIE1010H  Acoustics and Noise Control
MIE1064H  Control Analysis Methods with Applications to Robotics
MIE1068H  Applied Nonlinear Control
MIE1070H  Intelligent Robots for Society
MIE1075H  AI Applications in Robotics (prerequisites: control systems, robotics, AI fundamentals)
MIE1076H  AI Applications in Robotics II (prerequisites: MIE1075H, control Systems, robotics, AI fundamentals)
MIE1077H  AI Applications in Robotics III (prerequisites: robotics, MIE1075H, MIE1076H, or equivalent)
MIE1080H  Introduction to Healthcare Robotics
MIE1452H  Signal Processing for Bioengineering
MIE1453H  Introduction to Sensors and Sensor Network
MIE1718H  Computer Integrated Manufacturing
MIE1766H  Aluminum Die Casting 2. — Product Design and Optimization
MIE1767H  Mechatronics in Automotive Applications 1
MIE1768H  Mechatronics in Automotive Applications 2 (prerequisite: MIE1767H)
MIE1809H  Advanced Mechatronics

**Operations Research**

MIE1007H  Integer Programming
MIE1005H  Stochastic Processes
MIE1007H  Stochastic Processes
MIE1010H  Stochastic Programming and Robust Optimization (prerequisites: MIE262, APS1005H, or equivalent; and MIE231, APS106, or equivalent)
MIE1013H  Stochastic Simulation
MIE1615H  Markov Decision Processes
MIE1616H  Research Topics in Healthcare Engineering
MIE1619H  Constraint Programming and Hybrid Algorithms
MIE1620H  Linear Programming and Network Flows
MIE1621H  Non-Linear Optimization
MIE1622H  Computational Finance and Risk Management
MIE1623H  Introduction to Healthcare Engineering
MIE1624H  Introduction to Data Science and Analytics
MIE1628H  Big Data Science
MIE1653H  Integer Programming Applications
MIE1699H  Special Topics in Operations Research
MIE1714H  Failure Analysis
MIE1721H  Reliability
MIE1723H  Engineering Asset Management
MIE1727H  Quality Assurance I

**Thermal Sciences**

MIE1101H  Advanced Classical Thermodynamics
MIE1107H  Statistical Thermodynamics
MIE1115H  Heat Transfer with Phase Change
MIE1118H  Partially Ionized Gases
MIE1120H  Current Energy Infrastructure and Resources
MIE1122H  Combustion Engine Processes
MIE1123H  Fundamentals of Combustion
MIE1127H  Engineering Applications of Waves
MIE1129H  Nuclear Engineering I: Reactor Physics and the Nuclear Fuel Cycle

MIE562H  Scheduling
MIE566H  Decision Analysis
MIE1603H  Integer Programming
MIE1605H  Stochastic Processes
MIE1607H  Stochastic Modelling and Optimization
MIE1612H  Stochastic Programming and Robust Optimization (prerequisites: MIE262, APS1005H, or equivalent; and MIE231, APS106, or equivalent)
MIE1613H  Stochastic Simulation
MIE1615H  Markov Decision Processes
MIE1616H  Research Topics in Healthcare Engineering
MIE1619H  Constraint Programming and Hybrid Algorithms
MIE1620H  Linear Programming and Network Flows
MIE1621H  Non-Linear Optimization
MIE1622H  Computational Finance and Risk Management
MIE1623H  Introduction to Healthcare Engineering
MIE1624H  Introduction to Data Science and Analytics
MIE1628H  Big Data Science
MIE1653H  Integer Programming Applications
MIE1699H  Special Topics in Operations Research
MIE1714H  Failure Analysis
MIE1721H  Reliability
MIE1723H  Engineering Asset Management
MIE1727H  Quality Assurance I

**MIE561H  Healthcare Systems**
### APS Engineering Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APS1005H</td>
<td>Operations Research for Engineering Management</td>
</tr>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1013H</td>
<td>Applying Innovation in Engineering and Business Operations</td>
</tr>
<tr>
<td>APS1015H</td>
<td>Social Entrepreneurship</td>
</tr>
<tr>
<td>APS1016H</td>
<td>Financial Management for Engineers</td>
</tr>
<tr>
<td>APS1017H</td>
<td>Supply Chain Management and Logistics</td>
</tr>
<tr>
<td>APS1022H</td>
<td>Financial Engineering 2</td>
</tr>
<tr>
<td>APS1023H</td>
<td>New Product Innovation</td>
</tr>
<tr>
<td>APS1028H</td>
<td>Operations and Production Management for Manufacturing and Services</td>
</tr>
<tr>
<td>APS1032H</td>
<td>Introduction to Energy Project Management</td>
</tr>
<tr>
<td>APS1034H</td>
<td>Making Sense of Accidents</td>
</tr>
<tr>
<td>APS1043H</td>
<td>Writing Your Own Patent Application</td>
</tr>
<tr>
<td>APS1049H</td>
<td>Management Consulting for Engineers</td>
</tr>
<tr>
<td>APS1050H</td>
<td>Blockchain Technologies and Cryptocurrencies</td>
</tr>
<tr>
<td>APS1051H</td>
<td>Portfolio Management Praxis Under Real Market Constraint</td>
</tr>
<tr>
<td>APS1052H</td>
<td>Artificial Intelligence in Finance: From Neural Networks to Deep Learning</td>
</tr>
<tr>
<td>APS1061H</td>
<td>Business Strategy and Intrapreneurship</td>
</tr>
<tr>
<td>APS1070H</td>
<td>Foundations of Data Analytics and Machine Learning</td>
</tr>
<tr>
<td>APS1101H</td>
<td>System Dynamic Risk Assessment (recommended prerequisite: APS1034H)</td>
</tr>
<tr>
<td>APS1801H</td>
<td>Multidisciplinary MEng Project</td>
</tr>
<tr>
<td>APS1802Y</td>
<td>Multidisciplinary MEng Project</td>
</tr>
<tr>
<td>APS1803Y</td>
<td>Multidisciplinary MEng Project</td>
</tr>
<tr>
<td>APS2000Y</td>
<td>Summer Engineering Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>TEP1203H</td>
<td>Teaching Engineering in Higher Education</td>
</tr>
<tr>
<td>TEP1204H</td>
<td>Instructional Design in Engineering Education</td>
</tr>
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</table>

### SCFI MEng Courses

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>MIE1750H</td>
<td>Innovation Management I</td>
</tr>
<tr>
<td>MIE1751H</td>
<td>Innovation Management II</td>
</tr>
<tr>
<td>MIE1752H</td>
<td>Innovation Finance and Economics</td>
</tr>
<tr>
<td>MIE1753H</td>
<td>Legal Framework for Innovation</td>
</tr>
<tr>
<td>MIE1754H</td>
<td>Laser Applications in Manufacturing</td>
</tr>
<tr>
<td>MIE1755H</td>
<td>CAE Technologies in Automotive Engineering</td>
</tr>
<tr>
<td>MIE1757H</td>
<td>Electric Motor Technologies in Automotive Engineering</td>
</tr>
<tr>
<td>MIE1758H</td>
<td>Polymers and Composites in Automotive Design and Manufacturing</td>
</tr>
<tr>
<td>MIE1759H</td>
<td>Polymers and Composites Processing in Automotive</td>
</tr>
<tr>
<td>MIE1760H</td>
<td>Metals in Automotive Design and Manufacturing</td>
</tr>
<tr>
<td>MIE1761H</td>
<td>Metal Forming Simulation</td>
</tr>
<tr>
<td>MIE1762H</td>
<td>Centrifugal and Positive Displacement Pumps I</td>
</tr>
<tr>
<td>MIE1763H</td>
<td>Hot Stamping 1. — Metallurgy, Materials, Thermomechanical Treatment, and Welding</td>
</tr>
<tr>
<td>MIE1764H</td>
<td>Hot Stamping 2. — Process and Product Performance Simulation and Optimization</td>
</tr>
<tr>
<td>MIE1765H</td>
<td>Aluminum Die Casting 1. — Metallurgy, Process Design, and Optimization</td>
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### Reading Courses

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<th>Course Title</th>
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<tbody>
<tr>
<td>MIE2002H</td>
<td>Readings in Industrial Engineering I (Credit/ No Credit)</td>
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<tr>
<td>MIE2003H</td>
<td>Readings in Industrial Engineering II (Credit/No Credit)</td>
</tr>
<tr>
<td>MIE2004H</td>
<td>Readings in Mechanical Engineering I (Credit/No Credit)</td>
</tr>
<tr>
<td>MIE2005H</td>
<td>Readings in Mechanical Engineering II (Credit/No Credit)</td>
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### Seminar Courses

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<tr>
<td>SRM3333Y</td>
<td>MIE Seminar Series for MASc Students</td>
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<tr>
<td>SRD4444Y</td>
<td>MIE Seminar Series for PhD Students</td>
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</table>

### Project

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<tbody>
<tr>
<td>MIE8888Y</td>
<td>MEng Research Project</td>
</tr>
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</table>
Medical Biophysics

Medical Biophysics: Introduction

Faculty Affiliation

Medicine

Degree Programs

Medical Biophysics

MSc and PhD

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Medical Biophysics, MSc, PhD
- Cardiovascular Sciences
  - Medical Biophysics, MSc, PhD
- Genome Biology and Bioinformatics
  - Medical Biophysics, PhD
- Neuroscience
  - Medical Biophysics, MSc, PhD

Overview

The Department of Medical Biophysics is an interdisciplinary graduate department dedicated to fundamental and translational research in biomedicine, with a particular focus on cancer. Research is carried out in the extensive facilities provided in the Princess Margaret Cancer Centre, Sunnybrook Research Institute, and the Hospital for Sick Kids Research Institute, as well as at other hospital locations.

The department accepts students in the biological and life sciences as well as in physics, engineering, and the mathematical sciences. It offers opportunities for research addressing fundamental problems in medical science: projects which cut across the conventional boundaries of biology, physics, engineering, chemistry, and medicine are encouraged. The department focuses on basic and applied research related to cancer, but also addresses neuroscience and cardiovascular medicine. Medical Biophysics research themes include biomedical imaging, cancer diagnosis and therapy, cancer mechanisms and models, cardiovascular sciences, data science and computational biology, image-guided therapy and device development, neuroscience, stem cells and regenerative medicine, and structural biology. For detailed information, please visit the departmental website.

Contact and Address

Web: medbio.utoronto.ca
Email: medbio.info@utoronto.ca
Telephone: (416) 634-8751 or (416) 634-8755

Department of Medical Biophysics
MaRS Centre, Princess Margaret Cancer Research Tower
101 College Street, Suite 15-701
Toronto, Ontario M5G 1L7
Canada

Medical Biophysics: Graduate Faculty

Full Members

Ailles, Laurie - PhD
Akens, Margarete - DVM, PhD
Andrews, David - PhD
Arrowsmith, Cheryl - BSc, PhD
Attisano, Liliana - BSc, PhD
Billia, Filio - BSc, MSc, MD, PhD
Bjerknes, Matthew - BSc, MSc, PhD
Boutros, Paul - PhD
Bratman, Scott - MD, PhD
Bristow, Robert - MB, MD, PhD
Burns, Peter - BSc, PhD
Chakrabarty, Avijit - BSc, MSc, PhD
Chen, Jean - PhD
Cunningham, Charles - BSc, MSc, PhD (Uptown Vice-Chair)
Czarnota, Gregory - MD, PhD
DaCosta, Ralph - PhD
Danska, Jayne - AB, PhD
De Carvalho, Daniel - PhD
Demore, Christine - PhD
Done, Susan - BA, BCh, MB, MA, MBA, PhD
Edwards, Aled - BSc, PhD
Filmus, Jorge - MSc, PhD
Foster, Stuart - BSc, MSc, PhD
Fraser, Paul - BSc, MSc, PhD
Gallie, Brenda - MD
Gariepy, Jean - BSc, PhD
Ghugre, Nilesh - BS, MS, MS, PhD
Goertz, David - MSc, PhD
Graham, Simon - BSc, PhD
Haibe-Kains, Benjamin - PhD
Hakem, Raz - PhD
Harding, Shane - PhD
He, Housheng - PhD
Hedley, David - MD
Hoffman, Michael - PhD
Hope, Kristin - PhD
Huang, Annie - MD
Hynynen, Kulervo - BSc, MS, PhD
Ikura, Mitsuhiro - BSc, PhD
Irwin, Meredith - MD
Iscove, Norman - MD, PhD
Jaffray, David - BSc, PhD
Julius, Michael - BSc, PhD
Jurisica, Igor - PhD, CRC
Keller, Gordon - BSc, PhD
Kerbel, Robert - BSc, PhD
Khokha, Rama - BSc, MSc, PhD
Kisliger, Thomas - PhD (Chair and Graduate Chair)
Koritzinsky, Marianne
Lau, Angus - PhD
Leong, Hon - MSc, PhD
Lerch, Jason - BA, PhD
Liige, Lothar - DipPhy, PhD (Downtown Graduate Coordinator)
Lin, Fa-Hsuan - PhD
Liu, Fei-Fei - MD
Liu, Geoffrey - BSc, MSc, MD
Liu, Stanley - MD, PhD
Lupien, Mathieu - PhD
Macgowan, Christopher - BSc, MSc, PhD
Maclintosh, Bradley - PhD
Mak, Tak - BSc, MSc, PhD
Malkin, David - MD (Associate Chair)
Marsden, Philip - MD
Martel, Anne - BSc, PhD
Mazhab-Jafari, Mohammad - MSc, PhD
Mcglade-Dolson, Jane - BSc, PhD
Medin, Jeffrey - BSc, PhD
Minden, Mark - MD, PhD
Moody, Alan - BA, MA, MBBS
Nieman, Brian - PhD
Notta, Faiyaz - MS, PhD
O'Brien, Catherine - BSc, MSc, DrMed, PhD
Paige, Christopher - BSc, PhD
Penn, Linda - BSc, PhD
Prive, Gil - BSc, PhD
Pugh, Trevor - PhD
Raught, Brian - BS, MS, PhD
Reedijk, Michael - BSc, MSc, MD, PhD
Reimand, Juri - MSc, PhD
Ross, Bernhard - Diplng, PhD
Rottapel, Robert - BA, MD
Rubinstein, John - BSc, PhD, PhD
Santyr, Giles - PhD
Schimmer, Aaron - MD, PhD
Sled, John - BASc, MEng, PhD (Downtown Vice-Chair)
Spaner, David - PhD
Stambolic, Vuk - BSc, MSc, PhD
Stanisz, Greg - PhD (Uptown Graduate Coordinator)
Stefanovic, Bojana - BASc, PhD
Strother, Stephen - BSc, MS, PhD
Tabori, Uri - MBBS
Taylor, Michael - BSc, DrMed, PhD
Trudel, Suzanne - MSc, MD
Tsao, Ming-Sound - BSc, MD
Uludag, Kamil - PhD
Van Der Kooy, Derek - BSc, MA, PhD
Vitkin, Alex - BASc, MAsc, PhD
Wilson, Brian - BSc, PhD
Wong, Chong Shun - MD
Woodgett, James - BSc, PhD
Wouters, Bradly - MSc, PhD
Wright, Graham - BSc, MSc, PhD
Yaffe, Martin - BSc, MSc, PhD
Zacksenhaus, Eldad - PhD
Zarrine-Afsar, Arash - BSc, PhD
Zheng, Gang - MSc, PhD

Associate Members

Bissonnette, Jean-Pierre - PhD
Chan, Steven - MD, PhD
Coolens, Catherine - BS, MB, PhD
Diamandis, Phedias - BS, MD, PhD
Goubran, Maged - PhD
Jones, Courtney - PhD
Kriel, Robert - DrMed, PhD
Lok, Benjamin - BSc, MD
McIntosh, Chris - PhD
Purdie, Thomas - BSc, PhD
Ramaswamy, Vijay - MD
Rink, Alexandra - BSc, PhD
Tiedemann, Rodger - MBChB, PhD
Tikhonova, Anastasia - PhD
Villemain, Olivier - MD
Wang, Bo - BS, MS, PhD
Weersink, Robert - BSc, PhD

Medical Biophysics: Medical Biophysics MSc

Master of Science

Program Description

The objective of the MSc program is for students to acquire written and oral scholarly research skills in Medical Biophysics. Students carry out a research project (which is usually laboratory-based), prepare a research thesis, take graduate-level courses, and attend and participate in research seminars. Students select from a flexible, modular curriculum and participate in department-wide Medical Biophysics Graduate Student Seminars which develop skills in cross-disciplinary communication.

All MSc students carry out a thesis project in a laboratory that they select by means of a rotations program on entry to the department. Through this project they acquire knowledge in the design of experiments and in the interpretation and critical analysis of research findings. Students submit a thesis that reports critically on their research and pass an oral examination. They are guided by a supervisory committee through which they have access to the wide range of expertise in our faculty.

Students participate in student symposium, invited lecture series, and research seminars throughout their program. They are encouraged to reclassify (transfer) into the PhD program through an examination during Year 2, taken about 20 months after entry.

Members Emeriti

Boyd, Norman - MD
Henkelman, Mark - BSc, MSc, PhD

Ottensmeyer, Peter - BASc, MA, PhD
Pai, Emil - PhD
Plewes, Donald - BSc, MSc, PhD
Rauth, A. Michael - BSc, PhD
Tannock, Ian - MD, PhD

Medical Biophysics

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Program Description

The objective of the PhD program is to prepare students for a career in biomedical research. It is designed to provide both a broad knowledge of biomedical science and advanced training in basic research at a subspecialty level. Thesis work may address fundamental and/or translational problems in the biology, diagnosis, and therapy of cancer, as well as areas of neuroscience and cardiovascular medicine. By the end of the program, graduates will have acquired the ability to conduct independent theoretical and/or experimental research which makes an original contribution to the field, prepare publications, and give public presentations of their work at national and international venues.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Medical Biophysics' additional admission requirements stated below.
- Applicants from diverse academic backgrounds are encouraged to apply.

Program Requirements

- Coursework. Students must complete a total of 2.5 full-course equivalents (FCEs) as follows:
  - MBP1015Y0 Biophysics Seminar (1.0 FCE). Note that students must attend this continuous course until their degree program is completed.
  - MBP1200H Scientific Exposition and Ethics (0.25 FCE).
  - MBP1201H Biostatistics (0.25 FCE).
  - One of the following two options:
    - a biology-stream module (0.25 FCE) or
    - a graduate course (0.25 FCE) chosen in consultation with the department that provides a foundation in biology.
  - The balance of 0.75 FCE is chosen from any of the other course modules; or (with departmental approval) graduate courses in another department.
  - Modules are taken within courses. See the course list below.
- Successful completion of an oral examination of the student's research thesis.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Medical Biophysics: Medical Biophysics

PhD

Doctor of Philosophy

Coursework. Students must complete a total of 3.5 full-course equivalents (FCEs) as follows:

- MBP1015Y0 Biophysics Seminar (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
- MBP1200H Scientific Exposition and Ethics (0.25 FCE).
- MBP1201H Biostatistics (0.25 FCE).
- One of the following two options:
  - a biology-stream module (0.25 FCE) or
  - a graduate course (0.25 FCE) chosen in consultation with the department that provides a foundation in biology.

These objectives are met through a combination of coursework, teaching, and research seminars, mentored laboratory research, and preparation of manuscripts for publication. Graduates may attain professorial positions in academic research and teaching institutions, hospital laboratories, and in the medical device, pharmaceutical, and biomedical science and information industries, including startup companies which they have founded.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree into the four-year full-time program; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of a BSc degree.
The balance of 1.75 FCE is chosen from any of the other course modules; or (with departmental approval) graduate courses in another department.

- Students must complete all required coursework by the end of Year 3 in order to achieve candidacy. Upon achieving candidacy, completion is noted on the student's transcript.
- Students must take a PhD Qualifying Examination in Year 2.
- Successful completion of a Doctoral Final Oral Examination of the student's research thesis.

**Program Length**

4 years full-time

**Time Limit**

6 years full-time

Course that may continue over a program. The course is graded when completed.

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**PhD Program (Transfer)**

**Transfer Requirements**

- Applicants may be accepted into the PhD program via transfer from the University of Toronto Medical Biophysics MSc program with an A– average and by successfully defending a research proposal during a reclassification oral examination within 20 months in the program.

**Program Requirements**

- All PhD students will participate in MBP1015Y0 Biophysics Seminar regardless of whether or not they have previously received credit for it.
- Students who transfer/reclassify into the doctoral program will receive credit for all courses taken during their MSc program in Medical Biophysics. See the course requirements above for the PhD program. Students must have an A– average in these courses.
- Students will defend a research thesis at the Doctoral Final Oral Examination conducted by Medical Biophysics and the School of Graduate Studies.
- Except by special arrangement, students must attend the research institute or campus laboratory and participate full-time until all program requirements are completed.
- Coursework. Students must complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - MBP1015Y0 Biophysics Seminar (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - MBP1200H Scientific Exposition and Ethics (0.25 FCE).
  - MBP1201H Biostatistics (0.25 FCE).
  - One of the following two options:
    - a biology-stream module (0.25 FCE) or
    - a graduate course (0.25 FCE) chosen in consultation with the department that provides a foundation in biology.

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**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Medical Biophysics' additional admission requirements stated below.
- Outstanding students may be admitted directly to the PhD program following completion of a BSc degree with an A– average in biological, physical, chemical, or medical sciences from a recognized Canadian university or equivalent.
- Applicants holding bachelor's degrees from non-Canadian universities must provide Graduate Record Examination scores (General and Subject) with their application.
- Admission to the PhD program is highly selective and attainment of minimum admission requirements does not guarantee acceptance.

**Program Requirements**

- Students must successfully defend a research proposal during a qualifying oral examination within 18 months of entry into the program.
- Students will defend a research thesis at the Doctoral Final Oral Examination conducted by the Department of Medical Biophysics and the School of Graduate Studies.
- Except by special arrangement, students must attend the research institute or campus laboratory and participate full-time until all program requirements are completed.
- Coursework. Students must complete a total of 3.5 full-course equivalents (FCEs) as follows:
  - MBP1015Y0 Biophysics Seminar (1.0 FCE). Note that this is a continuous course which students must attend until their degree is completed.
  - MBP1200H Scientific Exposition and Ethics (0.25 FCE).
  - MBP1201H Biostatistics (0.25 FCE).
  - One of the following two options:
- a biology-stream module (0.25 FCE) or
- a graduate course (0.25 FCE) chosen in consultation with the department that provides a foundation in biology.
  - The balance of 1.75 FCE is chosen from any of the other course modules; or (with departmental approval) graduate courses in another department.
  - Students must complete all required coursework by the end of Year 4 in order to achieve candidacy. Upon achieving candidacy, completion is noted on the student's transcript.
- Students must take a PhD Qualifying Examination in Year 2.
- Successful completion of a Doctoral Final Oral Examination of the student's research thesis.

Program Length

5 years

Time Limit

7 years

Course that may continue over a program. The course is graded when completed.

Medical Biophysics: Medical Biophysics

MSc, PhD Courses

Each September the department publishes a list of specific modules available to students during the following two academic years. Please consult with the department.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBP1015Y0</td>
<td>Biophysics Seminar (1.0 FCE)</td>
</tr>
<tr>
<td>MBP1200H</td>
<td>Scientific Exposition and Ethics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1201H</td>
<td>Biostatistics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1300H</td>
<td>Quantitative Cancer Genomics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1301H</td>
<td>Radiation Oncology: Clinical and Experimental Radiobiology (0.5 FCE)</td>
</tr>
<tr>
<td>MBP1302H</td>
<td>Structural Biology and Proteomics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1303H</td>
<td>Cell Signaling and Metabolism (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1304H</td>
<td>Predictive Oncology and Therapeutics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1305H</td>
<td>Experimental Models for Cancer Research (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1306H</td>
<td>Cancer Epigenetics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1307H</td>
<td>Development, Stem Cells, and Cancer (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1308H</td>
<td>Radiation Biology and DNA Repair (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1309H</td>
<td>Clinical Imaging for Physical Scientists (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1310H</td>
<td>Cancer Immunotherapy (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1311H</td>
<td>Tumour Microenvironment (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1400H</td>
<td>Advanced Magnetic Resonance Imaging (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1401H</td>
<td>Advanced Ultrasound (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1402H</td>
<td>Biological Imaging (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1403H</td>
<td>Biophysics of Focused Ultrasound, Thermal Biophysics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1404H</td>
<td>Cell and Molecular Biology for Physicists – Introduction (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1405H</td>
<td>Introduction to Bio-Microscopies (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1406H</td>
<td>Introduction to Biophotonics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1407H</td>
<td>Magnetic Resonance Imaging – Overview (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1408H</td>
<td>Medical Device Commercialization Essentials (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1409H</td>
<td>Medical Device Innovation and Entrepreneurship (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1410H</td>
<td>Nanotechnology for Medicine (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1411H</td>
<td>Overview of Medical Imaging (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1412H</td>
<td>Ultrasound – Overview (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1413H</td>
<td>Advanced Biostatistics (0.25 FCE)</td>
</tr>
<tr>
<td>MBP1414H</td>
<td>Reading Special Topics (0.25 FCE)</td>
</tr>
</tbody>
</table>

Course that may continue over a program. The course is graded when completed.
Medical Science

Medical Science: Introduction

Faculty Affiliation

Medicine

Degree Programs

Biomedical Communications

MScBMC

- Fields:
  - Biomedical Media Design;
  - Biomedical Visualization Design

Medical Science

MSc and PhD

- Fields:
  - Bioethics;
  - Biomedical Science;
  - Clinical Science;
  - Health Professions Education;
  - Population Health/Health Services;
  - Radiation Oncology

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Medical Science, MSc, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Medical Science, MSc, PhD
- Bioethics
  - Medical Science, MSc, PhD
- Biomedical Engineering
  - Medical Science, MSc, PhD
- Cardiovascular Sciences
  - Medical Science, MSc, PhD
- Developmental Biology
  - Medical Science, MSc, PhD
- Environment and Health
  - Medical Science, MSc, PhD
- Genome Biology and Bioinformatics
  - Medical Science, PhD
- Global Health (U of T Global Scholar)
  - Medical Science, PhD
- Health Services and Policy Research
  - Medical Science, MSc, PhD
- Indigenous Health
  - Medical Science, MSc, PhD
- Knowledge Media Design
  - Medical Science, MSc, PhD
- Musculoskeletal Sciences
  - Medical Science, MSc, PhD
- Neuroscience
  - Medical Science, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Medical Science, MSc, PhD
- Toxicology
  - Medical Science, MSc, PhD
- Women's Health
  - Medical Science, MSc, PhD

Diploma Programs

Graduate Diploma in Health Research

GDipHR

Overview

With over 600 faculty and 550 students, the Institute of Medical Science (IMS) was established to foster education and scholarship in the Clinical Departments of the Faculty of Medicine. IMS specializes in translational research with a strong emphasis on bench-to-bedside clinical applications. Degree candidates have the opportunity to conduct research in one of four training areas: bio-medical science; clinical science; health systems and services; and population health. Graduates have been appointed to positions as academics and health-care professionals in universities, government, and industry.

Contact and Address

Biomedical Communications Program

Web: bmc.med.utoronto.ca
Email: bmc.info@utoronto.ca
Telephone: (905) 569-4849

Biomedical Communications
University of Toronto Mississauga
HSC 308, 3359 Mississauga Road
Mississauga, Ontario L5L 1C6
Canada

Medical Science Program

Web: ims.utoronto.ca/core-team
Telephone: (416) 946-8286
Fax: (416) 971-2253
Graduate Diploma in Health Research

Web: md.utoronto.ca/graduate-diploma-health-research
Email: gdipl.hres@utoronto.ca
Telephone: (416) 946-7866

Graduate Diploma in Health Research
University of Toronto
Medical Sciences Building
Room 2374, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Medical Science: Graduate Faculty

Full Members

Advani, Andrew - MBChB, PhD
Agur, Anne - BSc, MSc, PhD
Akbari, Mohammad - MD, PhD
Al-Omran, Mohammed - MSc, MBBS
Alibhai, Shabbir - MD
Allard, Johane - MD
Anagnostou, Evdokia - MD
Astell, Arlene - BSc, PhD
Bagby, Michael - BA, MA, PhD
Baker, Andrew - MD, MD
Baker, Andrew - MHSc, MD
Barr, Cathy - BSc, PhD
Bassett, Anne - BSc, MD
Batt, Jane - MD, PhD
Beitchman, Joseph - BSc, MPH, MDCM
Billia, Filio - BSc, MSc, MD, PhD
Black, Sandra - BSc, MD
Boggild, Andrea - BSc, MSc, MD
Bogoch, Earl - BA, MSc, MD
Boileau, Isabelle - PhD
Borschel, Gregory - BSc, DrMed
Brill, Julie - PhD
Brochard, Laurent - MD
Brooks, Dina - BSc(PT), MSc, PhD
Brown, Theodore - BSc, PhD
Brydges, Ryan - BSc, MSc, PhD
Cattran, Daniel - MD
Chandran, Vinod - MBBS, PhD
Chapman, Kenneth - MSc, MD
Chauhan, Vijay - MD
Chen, Robert - MB
Cherney, David - MD, PhD
Chertkow, Howard - MD
Cheung, Angela - BA, MD, PhD
Connelly, Kim - MBBS, PhD
Croitoru, Ken - MDCM
Cypel, Marcelo - DrMed
Das, Sunit - DrMed
Davis, Karen - BSc, MSc, PhD
Dawson, Laura - MD
De Luca, Vincenzo - MD, PhD
de Veber, Gabrielle - MD
Diamini, Nomazulu - MBBS
Donnelly, Sandra - BSc, MSc, MDCM
Dorian, Paul - MSc, MDCH
dos Santos, Claudia - MSc, MD
Dror, Yigal - MD
Drucker, Daniel - MD
Erl-Wagner, Birgit - MHSA, MD
Esplen, Mary Jane - BScN, MSN, PhD, RN
Fan, Eddy - BSc, MD, PhD
Fehlings, Michael - LMCC, MD, PhD
Feinstein, Anthony - MBChB, PhD
Feld, Jordan - MPH, MD
Feldman, Brian - MD
Feng, Zhong-Ping - PhD
Fish, Jason - BSc, PhD
Flint, Alastair - ChB
Floras, John - MD, DPhil
Furlan, Andrea - MD, PhD
Gaisano, Herbert - BS, MD
Gallinger, Steven - MSc, MD
George, Tony - BSc, MD
Gerretsens, Philip - MSW, MD, PhD
Gershon, Andrea - MSc, MD
Gilbert, Richard - MBBS, PhD
Ginsburg, Shiphera - MEd, MD
Gladdy, Rebecca - DrMed, PhD
Gladman, Dafna - MD
Graff-Guerrero, Ariel - MD
Grinstein, Sergio - BSc, PhD
Grunebaum, Eylal - MD
Guerguerian, Anne Marie - MD
Gupta, Neeru - BM
Hahn, Margaret - DrMed, PhD
Hamani, Clement - DrMed, PhD
Hamilton, Jill - BSc, MSc, MD
Haroon, Nigil - MBBS, MD, PhD
Heon, Elise - LMCC, MD
Herrmann, Nathan - MD
Hill, Sean - BA, PhD
Hdaie, Mojgan - BSc, MSc, MD
Humar, Atul - MSc, MD
Husain, Mansoor - MB, MD
Ibrahim, George - BS, MD, PhD
Janssen, Harry - MD, PhD
Jarvi, Keith - MD
Jenkinson, Jodie - BA, MSc, PhD
Jeschke, Marc - DrMed, PhD
Jewett, Michael - LMCC, MD
Jones, Jennifer - BA, PhD
Jones, Nicola - MD
Josselyn, Sheena - MA, PhD
Juvet, Stephen - DrMed, PhD
Kaplan, Allan - AA, BA, MSc, MD
Kapur, Andras - MD, PhD
Kassner, Andrea - MSc, PhD
Kaul, Rupert - MD, PhD
Keating, Armand - BSc, MD
Kennedy, James - MD
Kennedy, Sidney - DPsych, MBChB, BAO
Keshavjee, Shaf - BA, MSc, LMCC, MD
Khalvati, Farzad - MSc, PhD
Kingdom, John - DipCH, MB, MD
Kish, Stephen John - BSc, MSc, PhD
Kolla, Nathan - BA, MA, MD, PhD
Konvalinka, Ana - DrMed
Koritzinsky, Marianne
Members Emeriti

Chan, Helen - MBBS
Levy, Gary - BSc, MD
Seeman, Mary - BA, MDCH, MD
Toner, Brenda - BA, MA, PhD
Warsh, Jerry - MD
Yeger, Herman - BSc, MScPhm, PhD

Associate Members

Abrahao Junior, Agessandro - MSc, MSc, MD
Agarwal, Sri Mahavir - MD, PhD
Agid, Ofer - MD
Ahmed, Najma - BSc, MD, PhD
Anastakis, Dimitrios - BSc, MEd, MD
Andrade, Danielle - MSc, MD
Andreazza, Ana Cristina - BPhm, MSc, PhD, PhD
Andrews, Mahmutoglu - MD
Anthony, Samantha - PhD
Asztalos, Elizabeth - BScN
Baertschiger, Reto - MD, PhD
Barron, David - MD
Bernardini, Marcus - BSc, MSc, MD
Bhalerao, Shree - MD
Bhat, Venkat - MSc, MD
Bouchard, Maryse - MS, MDCHM
Boulos, Mark - BSc, MD
Brull, Richard - BS, MD
Campbell, Douglas - MD
Carcao, Manuel - MD
Chaton, Michael - DPhil
Chan, Steven - MD, PhD
Chepeha, Douglas - MD
Cheskes, Sheldon - BSc, DrMed
Chow, Edward - MBBS
Chung, Frances - MBBS
Chung, Jennifer - BEng, MD, MC
Cil, Tulin - BSc, MEd, DrMed
Clarke, Hance - MSc, MD
Corrin, Michael - BFA, BA, BSc, MSc
Court, John - MA
Cushing, Sharon L. - BSc, MD
Delgado, Diego - MD
Desarkar, Pushpal - MD
Diaconescu, Andreea - PhD
Diniz, Breno - MD, PhD
Dryer, Marc - BA, MSc, MCS
Dunkley, Benjamin - BSc, PhD
Eder, Lihi - DrMed
Emmenegger, Urban - MD
Fairn, Gregory - BSc, PhD
Fasano, Alfonso - MD, PhD
Felsky, Daniel - BSc, PhD
Ferguson, Sarah - BSc, MD
Finelli, Tony - BSc, MSc, MSc, PhD
Fischer, Corinne - MD
Floh, Alejandro - MD
Forbes, Thomas - MD
Foussias, George - BSc, MSc, DrMed, PhD
French, Leon - BSc, MSc, PhD
Friedberg, Mark - MD
Furlan, Julio - MSc, DrMed, PhD
Gagliardi, Anna - BSc, BE, MSc, MLS, PhD
Gagliese, Lucia - BSc, PhD
Giacobbe, Peter - MD
Glover, Benedict - MEd, MD
Goldstein, Roger - MBChB
Goligher, Ewan - DrMed, PhD
Gomez Jaramillo, David - MD, PhD
Goncalves, Vanessa - BSc, MSc, PhD
Gonska, Tanja - MD
Grasemann, Hartmut - MD
Green, Robin - PhD
Griffiths, John - BSc, MSc, PhD
Hahn, Cecil - MD
Haider, Masoom - BM, MD
Hamilton, Robert - BSc, MD, PhD
Hannon, Breffni - MB
Harnett, Nicole - BSc
Harrington, Jennifer - MBBS, PhD
Hawco, Colin - BSc, MSc, PhD
Haykal, Siba - BS, MD, PhD
Heyn, Chris - MD, PhD
Ho, Emily - BSc(OT), MEd, PhD, PhD
Hobson, Sebastian - MPH, BMedSc, MBBS, PhD
Hofer, Stefan - MD, PhD
Holden, Lori - BSc
Horjno, Osami - DrMed, PhD
Horlick, Eric - MD
Howe, Kathryn - BSc, MD, PhD
Ivers, Noah - MD
Jean-St-Michel, Emilie - MDCM
Jin, Yaping - PhD
Kahr, Walter - MD
Kamath, Binita - MBBS
Karkoulti, Keyvan - MD
Katzberg, Hans - BSc, MSc, MD
Kayssi, Ahmed - BS, BA, MS, MPH
Kiang, Michael - MD, PhD
Kidd, Sean - PhD
Kim, Dong Hwan (Dennis) - MD, PhD
Kitto, Simon - BA, BEd, DPhil
Kloiber, Stefan - DrMed
Knight, Andrea - MD
Kohut, Sara Helena Aholia - BA, MA, PhD
Kridel, Robert - DrMed, PhD
Kuruviella, John - MD
Kutryk, Michael - MD
Lai, Meng-Chuan - MD, PhD
Lebel, David - MS, MD, PhD
Lee, Jacques - MSc, MD
Li, Madeline - MD
Librach, Clifford - MD
Lim, Andrew - BSc, MD
Lin, Vincent - MD
Lok, Benjamin - BSc, MD
Mah, Linda - MHS, MD
Mahmud, Farid - MD
Mailis-Gagnon, Angela - MSc, MD
Malinowski, Ann - BScN, MSc, MD
Mandell, Daniel - BSc, MD, PhD
Mansur, Rodrigo - MD, PhD
Maralani, Pejman Jabeherd - MD
Matheson, Flora - BA, MA, PhD
Mathur, Sunita - BSc(PT), MSc(PT), PhD
Medical Science: Biomedical Communications MScBMC

Master of Science in Biomedical Communications

Program Description

The MScBMC is a two-year, course-based professional graduate program that prepares students for careers in the visual communication of science, medicine, and health. Students in this interdisciplinary program explore the use of images, interactive technologies, and animation/simulation to effectively communicate complex science and health topics to a range of audiences.

The program offers two fields: Biomedical Media Design and Biomedical Visualization Design. Students take the same courses in Year 1 and then choose their field at the start of the Summer session between Year 1 and Year 2.

Field: Biomedical Media Design

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science’s additional admission requirements stated below.
- Graduation from a recognized university with an appropriate four-year bachelor's degree that includes a variety of courses in the arts, sciences, and humanities.
- Minimum mid-B standing in the final two years of undergraduate study. Prerequisite courses: English (or an effective writing substitute); a humanities or social science course; biology; cell and molecular biology and/or histology; introductory physiology.
- At least one third- or fourth-year undergraduate course, or graduate course, from one or more of the following subject areas: Biochemistry, Cell Biology, Embryology, Genetics, Histology, Immunology, Molecular Biology, Pharmacology, or Physiology.
- A high-quality portfolio of visual material; consult the MScBMC website for guidance.

Program Requirements

- **Coursework.** Students must complete 8.5 full-course equivalents (FCEs) including:
  - in Year 2, complete 1.5 FCEs: MSC2002H, MSC2012H, and MSC2018H+
  - complete at least 1.0 FCE chosen from MSC2006H, MSC2008H, MSC2015H, MSC2016H
  - complete 1.0 FCE chosen from MSC2007H, MSC2011H, MSC2013Y, MSC2014H, and MSC2022H (or any other appropriate graduate course[s]).
• Students must complete MSC2025Y *Master's Research Project for BMC*.

**Program Length**

6 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W/S)

**Time Limit**

3 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**Medical Science: Biomedical Communications MScBMC Courses**

Consult the department each session regarding course offerings.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC1001Y</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>MSC2001Y</td>
<td>Visual Representation of Medical Knowledge</td>
</tr>
<tr>
<td>MSC2002H</td>
<td>Sequential Medical Communication</td>
</tr>
<tr>
<td>MSC2003Y</td>
<td>Biomedical Communications Technologies</td>
</tr>
<tr>
<td>MSC2004H</td>
<td>Research Methods</td>
</tr>
<tr>
<td>MSC2009H</td>
<td>Ethics and Professionalism in Biomedical Communications</td>
</tr>
<tr>
<td>MSC2012H</td>
<td>Neuroanatomy for Visual Communication</td>
</tr>
<tr>
<td>MSC2018H</td>
<td>Visual Representation of Processes in Human Pathology</td>
</tr>
<tr>
<td>MSC2020H</td>
<td>Visual Representation of Biomolecular Structure and Function</td>
</tr>
<tr>
<td>MSC2023H</td>
<td>Information Visualization (prerequisite: MSC1001Y; exclusion: MSC2019H)</td>
</tr>
<tr>
<td>MSC2025Y</td>
<td>Master's Research Project for BMC</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

**Elective Courses**

Students are encouraged to take at least one of their electives in a graduate program other than Biomedical Communications.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC2005H</td>
<td>Evolution of Medical Illustration</td>
</tr>
<tr>
<td>MSC2006H</td>
<td>Advanced Media Design Technologies</td>
</tr>
<tr>
<td>MSC2007H</td>
<td>Visual Synthesis of Medical/Scientific Process</td>
</tr>
<tr>
<td>MSC2008H</td>
<td>Community-Centred Design Research</td>
</tr>
<tr>
<td>MSC2011H</td>
<td>Special Topics in Biomedical Communications</td>
</tr>
<tr>
<td>MSC2013Y</td>
<td>Master's Research Project and Paper</td>
</tr>
</tbody>
</table>

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science's additional admission requirements stated below.
- Graduation from a recognized university with an appropriate four-year bachelor's degree that includes a variety of courses in the arts, sciences, and humanities.
- Minimum mid-B standing in the final two years of undergraduate study.
- At least one third- or fourth-year undergraduate course, or graduate course, from one or more of the following subject areas: Biochemistry, Cell Biology, Embryology, Genetics, Histology, Immunology, Molecular Biology, Pharmacology, or Physiology.
- A high-quality portfolio of visual material; consult the MScBMC website for guidance.

**Program Requirements**

- **Coursework.** Students must complete **8.5 full-course equivalents (FCEs)** as follows:
  - in Year 2, complete 1.5 FCEs: MSC2002H, MSC2012H, MSC2018H*
  - complete 1.5 FCEs: MSC2015H, MSC2016H, and MSC2017H
  - complete 0.5 elective FCE chosen from MSC2007H, MSC2011H, MSC2014H, and MSC2022H (or any other appropriate graduate course[s]).
- Students must complete MSC2025Y *Master's Research Project for BMC.*

**Program Length**

6 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W/S)
**Medical Science: Medical Science MSc**

**Master of Science**

**Program Description**

The MSc program is available in a wide range of basic sciences, clinical sciences, and population health research. Under the mentorship of a faculty member, a student receives specialized training and exposure to Toronto's finest multidisciplinary research. Students conduct research in one of six fields: Bioethics; Biomedical Science; Clinical Science; Health Professions Education; Population Health/Health Services; and Radiation Oncology.

The program emphasizes hands-on research, rather than coursework. Faculty conduct research in the following areas: cardiovascular sciences, bioethics, neuroscience, membrane biology, respiratory medicine, and psychosomatic medicine. The Institute of Medical Science (IMS) is the graduate unit of choice for undergraduates and MDs seeking training as clinician investigators, and graduates may seek positions as academics and health-care professionals in universities, government, and industry. The IMS participates in the Royal College of Physicians and Surgeons Clinical Investigator Program (CIP).

Students will complete the program in two years over six sessions.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science's additional admission requirements stated below.
- An appropriate BSc or an MD degree from a recognized university and academic credentials and background preparation appropriate to the field of study. Qualified university graduates with a professional health science degree (e.g., MD, BScN) or an undergraduate arts and science degree of appropriate background who wish to pursue graduate studies in basic or clinical biomedical sciences are encouraged to apply.
- Applicants lacking adequate background in biological, natural, or social sciences may be required to take undergraduate or graduate courses considered necessary to provide a proper basis for their research.
- A– (80%) average in the final year of undergraduate study and an A– cumulative average over three of the four total years of study.
- Applicants whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the **English language** through the successful completion of one of the following **English language proficiency tests**:
  - **Test of English as a Foreign Language (TOEFL):**
    - a minimum score of 600 on the paper-based test and 5 on the Test of Written English (TWE); or
    - a minimum score of 100 on the Internet-based test and 25 on the writing and speaking sections.
  - **International English Language Testing System (IELTS):** minimum score of 7.5 with 6.5 in each component.
  - **Certificate of Proficiency in English (COPE):** minimum total of 86 with a minimum writing score of 32, reading score of 22, and listening score of 22. Test of Oral Proficiency assessment band = 7.

**Medical Science: Medical Science PhD**

**Doctor of Philosophy**

**Program Description**

The PhD program is available in a wide range of basic sciences, clinical sciences, and population health research. Under the mentorship of a faculty member, a student receives specialized training and exposure to Toronto's finest multidisciplinary research. Students conduct research in one of six fields: Bioethics; Biomedical Science; Clinical Science; Health Professions Education; Population Health/Health Services; and Radiation Oncology.

The program emphasizes hands-on research, rather than coursework. Faculty conduct research in the following areas: cardiovascular sciences, bioethics, neuroscience, membrane biology, respiratory medicine, and psychosomatic medicine. The Institute of Medical Science (IMS) is the graduate unit of choice for undergraduates and MDs seeking training as clinician investigators, and graduates may seek positions as academics and health-care professionals in universities, government, and industry. The IMS participates in the Royal College of Physicians and Surgeons Clinical Investigator Program (CIP).

Minimum Admission Requirements

- Coursework. Students must complete a minimum of 2.0 **graduate full-course equivalent (FCEs)** as follows:
  - 0.5 FCE: MSC1010H0 MSc Student Seminars in Translational Research (Credit/No Credit).
  - 0.5 FCE: MSC modular courses (two courses worth 0.25 FCE each; Credit/No Credit).
  - 1.0 elective FCE.
- A research thesis and oral thesis examination.

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

**Time Limit**

3 years full-time

0 Course that may continue over a program. Credit is given when the course is completed.
biology, respiratory medicine, and psychosomatic medicine. The Institute of Medical Science (IMS) is the graduate unit of choice for undergraduates and MDs seeking training as clinician investigators, and graduates may seek positions as academics and health-care professionals in universities, government, and industry. The IMS participates in the Royal College of Physicians and Surgeons Clinical Investigator Program (CIP).

Applicants may enter the PhD program via one of three routes: 1) following completion of a two-year MSc degree with a defended MSc thesis; 2) transfer from the IMS MSc program; or 3) direct entry following completion of an appropriate BSc or MD degree.

Completion of the PhD may take longer than the program length indicated below.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science's additional admission requirements stated below.
- Applicants whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate facility in the English language through the successful completion of one of the following English-language proficiency tests:
  - Test of English as a Foreign Language (TOEFL): a minimum score of 600 on the paper-based test and 5 on the Test of Written English (TWE); or a minimum score of 100 on the Internet-based test and 25 on the writing and speaking sections.
  - International English Language Testing System (IELTS): minimum score of 7.5 with 6.5 in each component.
- Applicants may be accepted into the PhD program after completing a two-year MSc degree (with a defended MSc thesis) with at least an A– standing from a recognized university.

Program Requirements

- Coursework. Students must complete a minimum of 2.0 graduate full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MSC1011H0 PhD Student Seminars in Translational Research (Credit/No Credit).
  - 0.5 FCE: MSC modular courses (two courses worth 0.25 FCE each; Credit/No Credit).
  - 1.0 elective FCE.
- A research thesis must be submitted and the student must pass an departmental examination before proceeding to the Doctoral Final Oral Examination conducted by the School of Graduate Studies.
- At the end of Year 3, students must have completed all program requirements exclusive of the thesis research in order to achieve candidacy.

Program Length

4 years

Time Limit

6 years

Course that may continue over a program. The course is graded when completed.

PhD Program (Transfer)

Transfer Requirements

- Applicants may be accepted into the PhD program via transfer from the University of Toronto MSc program. Outstanding students may be considered for reclassification/transfer into the PhD program without writing an MSc thesis.

Program Requirements

- Students must complete 3.0 graduate full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MSC1010H0 MSc Student Seminars in Translational Research (Credit/No Credit).
  - 0.5 FCE: MSC modular courses (two courses worth 0.25 FCE each; Credit/No Credit).
  - 1.0 elective FCE with a minimum A– average.
- If recommended by the Program Advisory Committee, the student will be evaluated in an oral transfer examination within 18 to 21 months of initial graduate registration. Alternatively, the Exam Committee may decide that the student must complete the MSc degree before being considered for admission to the PhD program.
- The successful applicant will enter the PhD program and complete:
  - 0.5 FCE: MSC1011H0 PhD Student Seminars in Translational Research (Credit/No Credit) if credit for MSC1010H has not been obtained prior to transfer.
  - 1.0 elective FCE.
- A research thesis must be submitted and the student must pass an internal examination before proceeding to the Doctoral Final Oral Examination conducted by the School of Graduate Studies.
- At the end of Year 3, students must have completed all program requirements exclusive of the thesis research in order to achieve candidacy.
Program Length

5 years

Time Limit

7 years

\( ^0 \) Course that may continue over a program. The course is graded when completed.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science’s additional admission requirements stated below.
- Applicants whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate facility in the English language through the successful completion of one of the following English-language proficiency tests:
  - Test of English as a Foreign Language (TOEFL): a minimum score of 600 on the paper-based test and 5 on the Test of Written English (TWE); or a minimum score of 100 on the Internet-based test and 25 on the writing and speaking sections.
  - International English Language Testing System (IELTS): minimum score of 7.5 with 6.5 in each component.
- Students are accepted via direct entry into the PhD program after completing an appropriate BSc or an MD degree, without completing an MSc degree.

Program Requirements

- **Coursework.** Students must complete a minimum of 3.0 graduate full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MSC1011H0 PhD Student Seminars in Translational Research (Credit/No Credit).
  - 0.5 FCE: MSC modular courses (two courses worth 0.25 FCE each; Credit/No Credit).
  - 2.0 elective FCEs.
  - Students may be required to take extra courses in addition to the degree requirements.
- Students must pass a **qualifying examination** within 18 to 21 months of entry.
- A research thesis must be submitted and the student must pass an internal examination before proceeding to the Doctoral Final Oral Examination conducted by the School of Graduate Studies.

- At the end of Year 4, students must have completed all program requirements exclusive of the thesis research in order to achieve candidacy.

Program Length

5 years

Time Limit

7 years

\( ^0 \) Course that may continue over a program. The course is graded when completed.

Medical Science: Medical Science MSc, PhD Courses

Not all courses are offered each year. Check the departmental website for course availability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCR1000Y</td>
<td>An Interdisciplinary Approach to Global Challenges</td>
</tr>
<tr>
<td>JCV1060H</td>
<td>Developmental Cardiovascular Physiology</td>
</tr>
<tr>
<td>JCV3060H</td>
<td>Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction</td>
</tr>
<tr>
<td>JCV3061H</td>
<td>Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System</td>
</tr>
<tr>
<td>JCV3062H</td>
<td>Advanced Topics in Cardiovascular Sciences — Heart Function</td>
</tr>
<tr>
<td>JCV3063H</td>
<td>Advanced Topics in Cardiovascular Sciences — Vascular</td>
</tr>
<tr>
<td>JCV3065H</td>
<td>Advanced Topics in Cardiovascular Sciences — Systems Biology</td>
</tr>
<tr>
<td>JDB1024Y</td>
<td>Topics in Developmental Biology (MSc)</td>
</tr>
<tr>
<td>JDB1025H</td>
<td>Developmental Biology (PhD)</td>
</tr>
<tr>
<td>JDB1026Y</td>
<td>Student Seminars in Developmental Biology (PhD)</td>
</tr>
<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
</tr>
<tr>
<td>JNP1016H</td>
<td>Graduate Seminar in Toxicology</td>
</tr>
<tr>
<td>JNP1017H*</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
</tr>
<tr>
<td>JNP1018H*</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
</tr>
<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience — Cellular and Molecular</td>
</tr>
<tr>
<td>JNS1000Y</td>
<td>Fundamentals of Neuroscience — Systems and Behaviour</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>JPM1005Y</td>
<td>Behavioural Pharmacology</td>
</tr>
<tr>
<td>JTB2010H</td>
<td>Proteomics and Functional Genomics</td>
</tr>
<tr>
<td>JTB2020H</td>
<td>Applied Bioinformatics</td>
</tr>
<tr>
<td>MSC1001Y</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>MSC1004H</td>
<td>Health and Pharmaceuticals (exclusion: HST440H)</td>
</tr>
<tr>
<td>MSC1006H</td>
<td>Neuroanatomy</td>
</tr>
<tr>
<td>MSC1008H</td>
<td>Advanced Human Embryology and Teratology</td>
</tr>
<tr>
<td>MSC1010H</td>
<td>MSc Student Seminars in Translational Research (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1011H</td>
<td>PhD Student Seminars in Translational Research (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1040H</td>
<td>Physiologic Basis of Disease</td>
</tr>
<tr>
<td>MSC1081H</td>
<td>Studies in Schizophrenia</td>
</tr>
<tr>
<td>MSC1085H</td>
<td>Molecular Approaches to Mental Health and Addictions</td>
</tr>
<tr>
<td>MSC1087H</td>
<td>Neuroimaging Methods Using Magnetic Resonance Imaging</td>
</tr>
<tr>
<td>MSC1088H</td>
<td>Brain Positron Emission Tomography</td>
</tr>
<tr>
<td>MSC1089H</td>
<td>The Biopsychosocial Basis of Mental Health and Addictive Disorders</td>
</tr>
<tr>
<td>MSC1090H</td>
<td>Introduction to Computational Biostatistics with R</td>
</tr>
<tr>
<td>MSC1100H</td>
<td>Success in Graduate School: a Professional Development Module for MSc Students (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1101H</td>
<td>Success After Graduate School: a Professional Development Module for PhD Students (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1102H</td>
<td>Psychiatric Implications of Traumatic Brain Injury (Credit/No Credit)</td>
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<tr>
<td>MSC1103H</td>
<td>Knowledge Translation (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1104H</td>
<td>Neurodegenerative Disease (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1105H</td>
<td>Clinical Trials (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1106H</td>
<td>GREAT Network Epidemiology, Biostatistics, and Surveillance Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1107H</td>
<td>Biostatistics in a Nut Shell (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1108H</td>
<td>Animal Models of Human Diseases (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1109H</td>
<td>Introduction to Neuroimaging (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1110H</td>
<td>Strategic Training in Transdisciplinary Radiation Science for 21st C (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1111H</td>
<td>Strategies for Systematic, Scoping, or Other Comprehensive Searches of Literature (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1113H</td>
<td>Radiomics and Machine Learning for Medical Imaging (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC2003Y</td>
<td>Biomedical Communications Technologies</td>
</tr>
<tr>
<td>MSC2010Y</td>
<td>Molecular Medicine in Human Genetic Disease</td>
</tr>
<tr>
<td>MSC3001H</td>
<td>Foundations in Musculoskeletal Science</td>
</tr>
<tr>
<td>MSC4001H</td>
<td>Foundations in Resuscitation Science Research</td>
</tr>
<tr>
<td>MSC6000H</td>
<td>Special Topics Reading Course</td>
</tr>
<tr>
<td>MSC7000Y</td>
<td>Regenerative Medicine</td>
</tr>
</tbody>
</table>

Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Course that may continue over a program. Credit is given when the course is completed.

Medical Science: Health Research GDipHR

Graduate Diploma in Health Research

Program Description

The Graduate Diploma in Health Research provides a select group of medical students high-quality training in health research in order to understand, interpret, and apply the rapid changes in the scientific underpinnings of health care. Future physicians will gain skills relevant to contributing to health-related studies in their future careers, some of whom will become leaders of health research. Taken concurrently with the MD program, the Graduate Diploma in Health Research aims to engage medical students in health research with the intent to develop applicable knowledge and skills that will inform and support a future career in any field of health research.

Minimum Admission Requirements

- Diploma students must meet the School of Graduate Studies minimum admission requirements for master’s level diploma programs. Applicants must be enrolled, and in good academic standing, in Year 1 of the MD program of the Temerty Faculty of Medicine of the University of Toronto.
Applicants must submit the following:
- curriculum vitae (CV)
- a personal statement explaining their interest in the program
- a description of a research project they are interested in
- written confirmation of Good Standing in the MD program (letter from the program, signed by the Registrar or Vice-Dean
- undergraduate and/or graduate academic transcripts.

Program Requirements

- Students must complete a total of 2.5 full-course equivalents (FCEs) as follows:
  - Two required courses (2.0 FCEs):
    - MSC1991Y0 Supervised Research Project (Credit/No Credit).
    - MSC1992Y0 Research Skills for the Physician-Scientist (Credit/No Credit).
  - 0.5 elective FCE selected from an approved list.
  - Substitution of any other graduate-level course relevant to the student's research course but not found on the approved list will require completion of a course exemption form signed by the Institute of Medical Science's Graduate Coordinator. The selection of the course will be done in consultation with the Program Director.
- Students must maintain good academic standing in the MD program throughout.

Program Length

5 sessions part-time (W/S/F/W/S)

Time Limit

8 sessions part-time

0 Course that may continue over a program. Credit is given when the course is completed.

Medical Science: Health Research GDipHR Courses

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC1991Y0</td>
<td>Supervised Research Project (Credit/No Credit)</td>
</tr>
<tr>
<td>MSC1992Y0</td>
<td>Research Skills for the Physician-Scientist (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Approved Elective Courses by Graduate Unit

Health Policy, Management and Evaluation (Dalla Lana School of Public Health)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCV3060H</td>
<td>Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction</td>
</tr>
<tr>
<td>JCV3061H</td>
<td>Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System</td>
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<td>MSC1081H</td>
<td>Studies in Schizophrenia</td>
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<tr>
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<tr>
<td>MSC1089H</td>
<td>The Biopsychosocial Basis of Mental Health and Addictive Disorders</td>
</tr>
</tbody>
</table>
Medieval Studies

Medieval Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Medieval Studies

MA and PhD

- Fields:
  - Auxiliary Sciences;
  - History and Religion;
  - Language and Literature;
  - Music and Art;
  - Philosophy and Theology

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Ancient and Medieval Philosophy
  - Medieval Studies, PhD
- Book History and Print Culture
  - Medieval Studies, MA, PhD
- Jewish Studies
  - Medieval Studies, MA, PhD
- Sexual Diversity Studies
  - Medieval Studies, MA, PhD
- Women and Gender Studies
  - Medieval Studies, MA, PhD

Overview

The Centre for Medieval Studies is concerned with the history, thought, and artistic expression of the various cultures of Europe and adjacent regions over the course of a millennium (circa 500 to 1500). The Centre for Medieval Studies in Toronto has an international reputation, resting on the wide-ranging interests of its faculty, the calibre and preparation of its graduates, and its outstanding library facilities.

The Centre for Medieval Studies provides interdepartmental programs in the medieval period. Students are expected to cross the limits of traditional subjects, and research is especially encouraged in often-neglected boundary areas between traditional departments.

The centre offers its students training in basic skills and tools in order to read the materials remaining from the medieval past and to explore them with learning and imagination. All students entering the centre are asked to improve their proficiency in Latin before registration, since there are Medieval Latin requirements for all degrees. Examinations in Medieval Latin are set at the beginning of the Fall session and at the end of the Spring session. All incoming students must take the Level One Latin examination at the beginning of the Fall session for placement purposes.

Contact and Address

Web: medieval.utoronto.ca
Email: medieval.studies@utoronto.ca
Telephone: (416) 978-4884

Centre for Medieval Studies
University of Toronto
3rd Floor, 125 Queen's Park
Toronto, Ontario M5S 2C7
Canada

Medieval Studies: Graduate Faculty

Full Members

Akbari, Suzanne - BA, MA, MPH, PhD
Andrée, Alexander - BA, PhD (Associate Director)
Bartlett, Kenneth - BA, MA, PhD
Black, Deborah - BA, MA, PhD
Bowen, William - BA, BMus, MA, PhD
Brilli, Elisa - MA, PhD
Caskey, Jill - AB, MA, MPH, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Cohen, Adam - PhD
Dewar, Michael - BA, MA, DPhil
Dimnik, Martin - BA, MA, MDiv, DPhil
Eisenbichler, Konrad - BA, MA, PhD
Everett, Nicholas - BA, MA, PhD
Gervers, Michael - BA, MA, PhD
Gillespie, Alexandra - BA, BSc, PhD
Ginther, James - BA, MA, PhD
Goering, Joseph - BA, MA, MSL, PhD
Guenther, Sebastian - MA, PhD
Haines, John - BSc, BA, MA, PhD
Hall, Bert - BA, PhD
Harrak, Amir - MA, LTh, PhD
Herren, Michael - PhD
Holmstedt, Robert - BA, MA, PhD
Iglesias, Yolanda - BA, BA, MA, PhD
Kavaler, Ethan Matt - PhD
Keith, Alison - BA, MA, PhD, FRSC
King, Peter - BA, PhD
Kivimae, Juri - AM, PhD
Kullmann, Dorothea - PhD
Magee, John - BA, MA, PhD (Director)
Meyerson, Mark - BA, PhD
Miles, Brent - PhD
Mulchahey, M. Michele - BA, MA, PhD
Murray, Jacqueline - PhD
Percy, Carol - BA, MA, DPhil
Pickavé, Martin - MA, PhD
Pierro, Franco - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Robins, William - BA, MPH, PhD
Ross, Jill - BA, MA, PhD

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MA Program (Coursework Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Medieval Studies' additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university with an average grade of at least a B+ in previous courses. Coursework in the medieval period must have formed part of the program.
- Applicants are required to have taken at least one full-year Latin introductory course with a grade of at least B+ or equivalent.
- Applicants for the MA degree, full-time and part-time, must:
  - Follow the application instructions on the department's website.
  - Complete forms in which they state the reasons for undertaking graduate studies in the medieval area and their qualifications for applying to do so.

Program Requirements

- MA students must pass the Level One Medieval Latin examination upon arrival or else attain credit in MST1000Y (1.0 full-course equivalent [FCE]) in the first year of enrolment in the MA program.
- For the coursework option, students:
  - Who pass the Level One Latin examination upon arrival must successfully complete 3.0 FCEs.
  - Who do not pass the Level One Latin examination on arrival must successfully complete 4.0 FCEs (including MST1000Y).
- In the MA program, course training in Latin is given at two levels. All students are expected to arrive with knowledge equivalent to at least a first-year university course in Latin language. MST1000Y Medieval Latin I is the MA-level course. While this course is preparatory to the departmental Level One Latin examination, a pass in the course does not guarantee a pass of the departmental examination at the corresponding level. Advanced seminars are open to those MA students who have achieved a pass of the Level Two Latin examination.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 6 sessions part-time

Time Limit

3 years full-time; 6 years part-time
MA Program (Coursework-Plus-Thesis Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Medieval Studies’ additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with an average grade of at least a B+ in previous courses. Coursework in the medieval period must have formed part of the program.
- Applicants are required to have taken at least one full-year Latin introductory course with a grade of at least B+ or equivalent.
- Applicants for the MA degree, full-time and part-time, must:
  - Follow the application instructions on the department's website.
  - Complete forms in which they state the reasons for undertaking graduate studies in the medieval area and their qualifications for applying to do so.

Program Requirements

- MA students must pass the Level One Medieval Latin examination upon arrival or else attain credit in MST1000Y (1.0 FCE) in Year 1 of the MA program.
- For the coursework-plus-thesis option, students must successfully complete:
  - Coursework: 3.0 FCEs or 2.0 FCEs plus a pass at the Level One Latin examination upon arrival in the program.
  - A thesis. An MA thesis must be on a topic approved by the Centre for Medieval Studies. The topic must be submitted to the Centre by November 30 of the MA year.
- In the MA program, course training in Latin is given at two levels. All students are expected to arrive with knowledge equivalent to at least a first-year university course in Latin language. MST1000Y Medieval Latin I is the MA-level course. While this course is preparatory to the departmental Level One Latin examination, a pass in the course does not guarantee a pass of the departmental examination at the corresponding level. Advanced seminars are open to those MA students who have achieved a pass of the Level Two Latin examination.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Medieval Studies: Medieval Studies PhD

Doctor of Philosophy

Program Description

The PhD is offered only on a full-time basis. Applicants may enter the PhD program via one of two routes: 1) following completion of a master’s degree in medieval studies or a related field; or 2) direct entry after completing an appropriate bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Medieval Studies (CMS)’s additional admission requirements stated below.
- Applicants enter with a master’s degree in medieval studies or a related field from a recognized university with an average grade of at least A– in the applicant’s overall program. Students in the CMS MA program must apply formally for admission to the PhD program on the same basis as all other applicants.
- All applicants must:
  - Follow the application instructions on the department's website.
  - Complete the forms in which they state the reasons for undertaking graduate studies in the medieval area and their qualifications for applying to do so.
  - Pass the Level One Latin examination before they may register in the PhD program.

Program Requirements

- During Years 1 and 2, students must take a minimum of 3.0 full-course equivalents (FCEs), i.e., 2.0 FCEs in a major field and 1.0 FCE in a minor field. In view of the CMS’s interdepartmental nature, some of these courses on the Middle Ages can be taken in other departments, with the approval of the PhD coordinator. MST1001Y may not be counted towards the 1.0 FCE minor field requirements or included in the 3.0 FCEs minimum for the degree; but it must be taken in addition to the 3.0 FCEs minimum by all those who do not pass the Level Two Latin examination right before or upon arrival in the program. In addition to the 3.0 FCEs minimum, MST1003H Professional Development for Medieval Studies PhDs (Credit/No Credit) must be taken by all students over the course of the first three years of registration.
- In the PhD program, course training in Latin is given at two levels. MST1001Y Medieval Latin II is the PhD-level course. While this course is preparatory to the departmental Level Two Latin examination, a pass in the course does not guarantee a pass of the departmental examination at the corresponding level. Advanced seminars are open to those with either prior credit in MST1001Y or else a pass of the Level Two Latin course.
Medieval Studies

It is possible to complete a PhD in Medieval Studies in four years. The candidate will be required to defend the dissertation at the Doctoral Final Oral Examination. The purpose of the Special Field Examination is to demonstrate both the student's scholarly expertise in the particular area of doctoral dissertation and a broader academic competence. The Special Field Examination is a two-hour-long oral exam to be held by April 30 of Year 3. The Special Field Examination is graded on a pass/fail basis. The Advisory Committee, in consultation with the Executive Committee, has the discretion to determine if a student may retake the Special Field Examination. Only one retake is permitted and must take place within two months of the first exam. Students who do not pass the Special Field Examination before the beginning of Year 4 will be recommended to SGS for termination of registration.

The candidate will be required to defend the dissertation at the Doctoral Final Oral Examination. It is possible to complete a PhD in Medieval Studies in four years, but some students, depending on their background preparation, find that it takes longer than four years. Students intending to work in an area of medieval studies that requires the acquisition of one or more extra languages may find that it is not possible to complete a doctorate within four years.

Program Length
4 years

Time Limit
6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Centre for Medieval Studies (CMS)'s additional admission requirements stated below.
• Applicants enter with an appropriate bachelor's degree from a recognized university with an average grade of at least A— in the applicant's overall program. Coursework in the medieval period must have formed part of the program.
• All applicants must:
  o Follow the application instructions on the department's website.
  o Complete the forms in which they state the reasons for undertaking graduate studies in the medieval area and their qualifications for applying to do so.
  o Pass the Level One Latin examination before they may register in the PhD program.

Program Requirements

• During Years 1, 2, and 3, students must take a minimum of 5.0 full-course equivalents (FCEs), including 2.0 FCEs in a major field and 1.0 FCE in a minor field. In view of the CMS's interdepartmental nature, some of these courses on the Middle Ages can be taken in other departments, with the approval of the PhD coordinator. MST1001Y may not be counted towards the 1.0 FCE minor field requirements or included in the 5.0 FCEs minimum for the degree, but it must be taken in addition to the 5.0 FCEs minimum by all those who do not pass the Level Two Latin examination right before or upon arrival in the program. In addition to the 5.0 FCEs minimum, MST1003H Professional Development for Medieval Studies PhDs (Credit /No Credit) must be taken by all students over the course of the first three years of registration.
• In the PhD program, course training in Latin is given at two levels. MST1001Y Medieval Latin II is the PhD-level course. While this course is preparatory to the departmental Level Two Latin examination, a pass in the course does not guarantee a pass of the departmental examination at the corresponding level. Advanced seminars are open to those with either prior credit in MST1001Y or else a pass of the Level Two Latin examination. These seminars thus serve both advanced students of medieval Latin as well as those who have passed MST1001Y but require further training in order to achieve the Level Two Latin examination pass.
• By the end of the Fall session of Year 3, students should have a full Advisory Committee, consisting of a supervisor and two other members. The Advisory Committee must be
formally approved by the PhD coordinator. During the Spring session of the same academic year, students should develop the **Special Field Proposal** in consultation with the Advisory Committee. The proposal consists of three documents:

- the **Reading List** (minimum 150 and maximum 250 items, including both primary and secondary sources) — should be submitted to the Advisory Committee members by June 30 of Year 2;
- the **Field paper** (approximately 8,000 to 12,000 words, including footnotes) — should be submitted to the Advisory Committee members and the CMS Executive Committee for approval by January 15 of Year 3; and
- the **Syllabus** — should be submitted, together with the final version of the Field paper, to the Advisory Committee members by March 31 of Year 3.

The proposal must be prepared according to CMS guidelines.

- Students must pass the **Level Two Latin examination** and the CMS's **examinations in the French and German languages** before moving on to the Special Field Examination. In exceptional cases, a student may petition to replace one of the modern languages (French and German) with another language in their area of research. A written request, with a signed confirmation of support for the petition from the supervisor, must be submitted as early as possible, and no later than the end of the Fall session of Year 2 for consideration by the Executive Committee. In the case of a successful petition, the student will be expected to take the exam no later than the next examination date. Such substitute examinations will be offered no more than two times per year (April and September). Failure to pass all the language exams by the end of the Spring session of Year 4 leads to an automatic failure of the Special Field Examination and thus to termination from the program.

- The purpose of the **Special Field Examination** is to demonstrate both the student's scholarly expertise in the particular area of doctoral dissertation and a broader academic competence. The Special Field Examination is a two-hour-long oral exam to be held by April 30 of Year 3. The Special Field Examination is graded on a pass/fail basis. The Advisory Committee, in consultation with the Executive Committee, has the discretion to determine if a student may retake the Special Field Examination. Only one retake is permitted and must take place within two months of the first exam. Students who do not pass the Special Field Examination before the beginning of Year 5 will be recommended to SGS for termination of registration.

- The candidate will be required to defend the dissertation at the **Doctoral Final Oral Examination**.

- It is possible to complete a direct-entry PhD in Medieval Studies in five years but some students, depending on their background preparation, find that it takes longer than five years. Students intending to work in an area of medieval studies that requires the acquisition of one or more extra languages may find that it is not possible to complete a doctorate within five years.

## Program Length

| 5 years |

## Time Limit

<p>| 7 years |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites/Exclusions</th>
</tr>
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<tbody>
<tr>
<td>MST2018H</td>
<td>Introduction to Celtic Latin</td>
<td>(Prerequisite: MST1001Y or a pass of Level 2 Latin Exam.)</td>
</tr>
<tr>
<td>MST2029H</td>
<td>Introduction to Old Irish</td>
<td>(Exclusion: MST2030Y.)</td>
</tr>
<tr>
<td>MST2030H</td>
<td>Old Irish Texts</td>
<td>(Prerequisite: MST2029H or equivalent. Exclusion: MST2030Y.)</td>
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<tr>
<td>MST2030Y</td>
<td>Old and Middle Irish</td>
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<tr>
<td>MST2032H</td>
<td>Medieval Irish Poetry 500–1600</td>
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<tr>
<td>MST2033H</td>
<td>Textual Studies in Medieval Irish Poetry</td>
<td>(PR)</td>
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<tr>
<td>MST2037H</td>
<td>Legendary History of Britain and Ireland from Celtic Sources</td>
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<td>MST2038H</td>
<td>Medieval Brittany (PR)</td>
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<tr>
<td>MST2040H</td>
<td>Beginnings of Medieval Rhetoric and Poetics (PR)</td>
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<tr>
<td>MST2042H</td>
<td>Medieval Literary Theory in the Later Middle Ages</td>
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<tr>
<td>MST2051H</td>
<td>Introduction to Middle Welsh</td>
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<tr>
<td>MST2052H</td>
<td>Medieval Welsh Texts</td>
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<tr>
<td>MST2055Y</td>
<td>Studies in Middle Welsh Texts (PR)</td>
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<tr>
<td>MST3015H</td>
<td>Introduction to Ge'ez (Classical Ethiopic)</td>
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<tr>
<td>MST3016H</td>
<td>Intermediate Ge'ez (Classical Ethiopic) (Prerequisite: MST3015H.)</td>
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<td>MST3021H</td>
<td>Boethius (PR)</td>
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<td>MST3022H</td>
<td>Consolation Through the Ages: Later Medieval Approaches to Boethius's Consolation of Philosophy (PR)</td>
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<tr>
<td>MST3035H</td>
<td>Medieval Representations of Death, Sickness, and Crime (1100–1500)</td>
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<tr>
<td>MST3113H</td>
<td>Figures of Heroism in Old English Literature (PR)</td>
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<tr>
<td>MST3123H</td>
<td>Introduction to Medieval Medicine</td>
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<tr>
<td>MST3124H</td>
<td>Medieval Studies in the Digital Age</td>
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<td>MST3125H</td>
<td>The Medieval Short Story</td>
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<tr>
<td>MST3126H</td>
<td>The Apocalypse in Medieval English Literature</td>
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<td>MST3135H</td>
<td>Digital Old English</td>
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<tr>
<td>MST3140Y</td>
<td>Medieval Catalan Language and Literature</td>
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<tr>
<td>MST3150H</td>
<td>Medieval French Epic: Kings and Heroes (PR)</td>
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<td>MST3152H</td>
<td>Introduction to Medieval Occitan (PR)</td>
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<tr>
<td>MST3153H</td>
<td>Medieval Occitan Literature</td>
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<td>MST3155H</td>
<td>Middle French Literature</td>
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<tr>
<td>MST3158H</td>
<td>The Roman de la Rose and Medieval Allegory (PR)</td>
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<td>MST3159H</td>
<td>Classical Antiquity in the French Middle Ages (PR)</td>
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<td>MST3160H</td>
<td>Introduction to Romance Philology: From Vulgar Latin to the First Literary Texts</td>
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<tr>
<td>MST3163H</td>
<td>Medieval French Historiography</td>
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<td>MST3164H</td>
<td>Medieval French Romance: The Grail</td>
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<td>MST3203H</td>
<td>Topics in Medieval Economic History</td>
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<tr>
<td>MST3205H</td>
<td>Violence in Medieval Society</td>
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<td>MST3207H</td>
<td>Decretists and Decretalists: Canonical Jurisprudence 1140–1300</td>
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<tr>
<td>MST3225H</td>
<td>Jews and Christians in Medieval and Renaissance Europe</td>
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<tr>
<td>MST3226H</td>
<td>Medieval Mediterranean History</td>
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<tr>
<td>MST3231H</td>
<td>Clio's Workshop: Introduction to Historical Methods</td>
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<tr>
<td>MST3232H</td>
<td>Vernacular Literature in Medieval Europe: Status and Function</td>
<td>(Prerequisite: basic reading knowledge of Latin and at least one medieval vernacular language.)</td>
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<tr>
<td>MST3235H</td>
<td>Communal Florence, 1150–1530</td>
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<tr>
<td>MST3237H</td>
<td>Through the Lens of Monastic Rules and Customaries</td>
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<tr>
<td>MST3241H</td>
<td>Everyday Life in Medieval Europe</td>
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<td>MST3242H</td>
<td>Carolingian Europe 750–900 CE</td>
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<tr>
<td>MST3244H</td>
<td>Saints of Early Medieval Italy</td>
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<tr>
<td>MST3251H</td>
<td>The Merovingians</td>
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<td>MST3255H</td>
<td>Bishops in the High Middle Ages</td>
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<td>MST3301H</td>
<td>Themes in Medieval Philosophy</td>
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<tr>
<td>MST3309H</td>
<td>Birth of the Will: Augustine and Anselm</td>
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<tr>
<td>MST3311H</td>
<td>Topics in Medieval Metaphysics (PR)</td>
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<tr>
<td>MST3321H</td>
<td>Philosophy of Mind in the Middle Ages (PR)</td>
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<td>MST3322H</td>
<td>William of Ockham</td>
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<tr>
<td>MST3327H</td>
<td>Free Will and Human Action in Medieval Philosophy</td>
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<td>MST3346H</td>
<td>Medieval Islamic Philosophy</td>
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<td>MST3501H</td>
<td>Introduction to the Medieval Christian Liturgy</td>
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<td>MST3601H</td>
<td>Medieval Spanish Sources in Context</td>
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<td>MST3602H</td>
<td>Crime and Punishment in the Middle Ages</td>
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<td>MST9310Y, H</td>
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<tr>
<td>NMC1500Y</td>
<td>Archaeology, from Alexander to Muhammad</td>
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<td>NMC2090Y</td>
<td>The Prophet and the Caliphates: Early Islamic History to 1258</td>
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<td>NMC2119H</td>
<td>Readings in Medieval Arabic Documents</td>
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<td>NMC2221H</td>
<td>Persian Mirrors for Princes</td>
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<td>NMC2226H</td>
<td>Medieval Persian Historical and Diplomatics</td>
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### Religion

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<tr>
<td>RLG3653H</td>
<td>Jewish Exegetical Traditions in Antiquity</td>
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### Slavic Languages and Literatures

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<tr>
<td>SLA1104H</td>
<td>Introduction to Old Church Slavonic (Credit/No Credit)</td>
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<tr>
<td>SLA1109H</td>
<td>Studies in Old Church Slavonic</td>
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</tbody>
</table>
Molecular Genetics

Molecular Genetics: Introduction

Faculty Affiliation

Medicine

Degree Programs

Genetic Counselling

MSc

Medical Genomics

MHSc

Molecular Genetics

MSc and PhD

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Developmental Biology
- Genome Biology and Bioinformatics
- Next-Generation Precision Medicine

Overview

The Department of Molecular Genetics is administered from the Medical Sciences Building and has nearly 100 faculty members whose labs are located within the Medical Sciences Building, the MaRS Centre, the Donnelly Centre, the Hospital for Sick Children, Mount Sinai Hospital, and the Ontario Institute for Cancer Research.

Faculty members run a variety of research programs in diverse areas such as genetic models of development and disease; molecular medicine and human genetics; cellular and molecular structure and function; molecular microbiology and infectious disease; computational and systems biology; functional genomics and proteomics.

Contact and Address

Web: www.moleculargenetics.utoronto.ca
Email: graduate.coordinator@utoronto.ca
Telephone: (416) 978-8359
Fax: (416) 978-6885

Department of Molecular Genetics
University of Toronto
Medical Sciences Building
Room 4398, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Molecular Genetics: Graduate Faculty

Full Members

Abelson, Sagi - PhD
Andrews, Brenda Jean - BSc, PhD
Andreulis, Irene - BA, PhD
Aubin, Jane - BSc, PhD
Awadalla, Philip - PhD
Bader, Gary - BSc, PhD
Blencowe, Benjamin - BSc, PhD
Boone, Charlie - BSc, PhD
Boulianne, Gabrielle - BSc, PhD
Brill, Julie - PhD
Brown, Martha - BSc, MSc, PhD
Brumell, John - BSc, PhD
Campbell, Kieran - PhD
Campos, Eric - PhD
Ciruna, Brian - BSc, PhD
Claycomb, Julie - BS, BA, PhD (Graduate Coordinator)
Cochrane, Alan - BSc, PhD
Collins, Richard - BSc, PhD
Cordes, Sabine - BS, PhD
Cowen, Leah - BSc, PhD
Culotti, Joseph - PhD
Davidson, Alan Richard - BSc, PhD
Delgado Olguin, Paul - BSc, PhD
Dennis, James - PhD
Derry, Brent - BSc, MSc, PhD
Dick, John - PhD
Dirks, Peter Benjamin - MD, PhD
Dowling, James - MD
Duan, Shumin - PhD
Durocher, Daniel - PhD
Edwards, Aled - BSc, PhD
Egan, Sean - PhD
Ellis, James - PhD
Ensminger, Alexander - BS, PhD
Ernst, Oliver - PhD
Frappier, Lori - PhD
Fraser, Andrew - BSc
Funnell, Barbara - PhD
Gallie, Brenda - MD
Gingras, Anne-Claude - BSc, PhD
Gray-Owen, Scott - BS, PhD
Greenblatt, Jack - BSc, PhD
Guo, Min-Xin - PhD
Hopyan, Sevan - BSc, MD, PhD
Huang, Xi - PhD
Hughes, Timothy - BSE, BMus, PhD (Interim Chair and Interim Graduate Chair)
Hui, Chi-Chung - PhD
Hurd, Thomas Ryan - BSc, PhD
Jackson, Hartland - PhD
Justice, Monica - PhD
Kafri, Ran - BSc, MSc, PhD
Kalish, Brian - MD
Kaplan, David - BA, PhD
Kay, Lewis - PhD
Ke, Yuehai - PhD
Kim, Tae-Hee - PhD
Krause, Henry - BSc, PhD
Lavoie, Brigitte - PhD
Lefebvre, Julie - PhD
Li, Xiao-Ming - MD
Li, Yun - PhD
Lipshtiz, Howard - PhD
Liu, Jun - PhD
Liu, Wei - PhD
Lu, Weiguo - PhD
Ma, Jun - PhD
Maass, Philipp - PhD
Meneghini, Marc - BSc, PhD
Miller, Freda - BSc, PhD
Moffat, Jason - BSc, PhD
Montenegro Burke, Rafa - MSD
Moran, Michael - BSc, PhD
Morris, Quaid - BS, PhD
Muffat, Julien - PhD
Navarre, William - BSc, PhD
Okarasek, Kenichi - BS, MA, PhD
Osborne, Lucy - PhD
Park, Jehee - PhD
Parkinson, John - BS, PhD
Pearson, Bret - BS, PhD
Pearson, Christopher - PhD
Pelletier, Laurence - BSc, MSc, PhD
Protze, Stephanie - PhD
Ramalho-Santos, Miguel - PhD
Reinke, Aaron - PhD
Rini, James - BSc, PhD
Rommens, Johanna - BSc, PhD
Rossant, Janet - PhD
Roth, Frederick - PhD
Roy, Peter John - BSc, PhD
Scherer, Stephen - PhD
Scharmek, Daniel - PhD
Scott, Ian - BSc, PhD
Segall, Jacqueline - BSc, PhD
Shu, Qiang - MD
Sicheri, Frank - BSc, PhD
Sidhu, Sachdev - BSc, DPhil
Smibert, Craig - BSc, PhD
Sondheimer, Neel John - MD, PhD
Spence, Andrew - BSc, PhD
Stagljar, Igor - BS, PhD
Stein, Lincoln - BA, MD, PhD
Steipe, Boris - MD, PhD
Taipale, Mikko - PhD
Van Der Kooy, Derek - BSc, MA, PhD
Wilde, Andrew Rhys - BSc, PhD
Wilson, Michael - BSc, PhD
Wranac, Jeff - PhD
Yang, Xiaohang - PhD
You, Ji-Young - PhD
Yuen, Ryan - PhD
Zhang, Zhaolei - BS, PhD
Zhen, Mei - PhD
Zhou, Tianhua - PhD
Zhu, Shankuan - PhD

Members Emeriti
Becker, Andrew - MD, PhD
Carver, Jeremy - BA, PhD
Sadowski, Paul - MD, PhD
Siminovitch, Louis - BSc, BSc, PhD

Associate Members
Amburagey, Kimberly - MSc
Aronson, Melyssa - BS, MS
Babul-Hirji, R尼亚 - BSc, MSc
Car, Melanie - BSc, MSc
Carnevale, Amanda - MSc
Carroll, Johanna - BA, PhD
Chitayat, David - MD
Cytynbaum, Cheryl - MSc
Druker, Harriet - MSc
Dupuis, Lucie - MSc
Fitzgerald, Islay - MSc
Fung, Charlotte - MSc
Gallinger, Bailey - MSc
Gibbons, Clare - BS, MSc
Graham, Tracy - MSc
Hedges, Stephanie - MSc
Hewson, Stacy - MSc
Hill, Jessica - BSc, MSc, PhD
Hoang, Ny - MSc
Johnstone, Brittney - MSc
Kaiser, Amy - BA
Klatt, Regan - BSc, MSc
Langlois, David J. - BA, MA, PhD
Lemmens, Trudo - LLM, DCL, Dr. William M. Scholl Chair in Health Law and Policy
Liston, Enskay - BA, MSc
Lorentz, Justin - MSc
Malcolmson, Janet - MSc
Martin, Nicole - BSc, MS
McCuaig, Jeanna - MS
Mendoza, Roberto - MD
Millar, Kathryn - BSc, MSc, SM
Miller, Kristen - MSc
Murphy, Jillian - BSc, PhD
Myles Reid, Diane - BSc, MSc
Nanda, Sonia - BS, MSc
Panchal, Seema - BSc, MSc
Quercia, Nada - BS, MSc
Semotiuk, Kara - BSc
Shugar, Andrea - BSc, MS
Shuman, Cheryl - MSc
Silver, Rachel - BSc, MSc
Steele, Leslie - BSc, MSc
Styles, Erin - BSc, PhD
Sweeney, Frederick - PhD
Szuto, Anna - MSc
Tam, Karen - BSc, MSc
Teltebaum, Ronni - BSc, MSc
Thain, Emily - MSc
Uster, Tamarah - BSc, MS
Voltenik, Alexandra - MSc
Waldman, Larissa - MSc
Watkins, Nicholas - MSc
Watts-Dickens, Abby - MSc
Weksberg, Rosanna - MD, PhD
Molecular Genetics: Genetic Counselling
MSc

Master of Science

Program Description

The MSc program is a full-time degree program (non-thesis) that prepares students with relevant academic knowledge and clinical skills so that upon graduating, they may work as highly competent genetic counsellors in a variety of practice settings. Genetic counsellors are employed in many areas of healthcare, providing genetic assessment and counselling to individuals and families with, or at risk for, a genetic disorder. There is also an increasing demand for genetic counsellors to join genetic/genomic testing laboratories, industry, public health settings, etc. Genetic counsellors are often involved in academic activities including teaching and research, administrative leadership roles, advisory roles for government and/or support organizations, and other precision medicine leadership capacities. This program is accredited by the Accreditation Council for Genetic Counseling.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Molecular Genetics' additional admission requirements stated below.
- A four-year undergraduate degree from a recognized university with a minimum B+ average, both cumulatively and in the upper years.
- Successful completion or proof of current enrolment of undergraduate courses at a recognized university in biology, molecular biology/genetics, biochemistry, embryology/animal developmental biology, statistics, and psychology.
- The development of strong interpersonal and communication skills, as evidenced by experience in a counselling setting (volunteer or paid).
- All applicants must register with the National Matching System (NMS); instructions are provided in the department's application procedures.

Program Requirements

- Students must complete **13.0 full-course equivalents (FCEs)** as follows:
  - 10.0 FCEs in coursework with a minimum B– standing. Lectures, meetings, and rounds must be attended at a minimum of 90% of scheduled occurrences.
  - 1.0 FCE independent research project. Students are expected to develop and implement a research study designed and carried out by them under the supervision of a faculty member. The independent research project must be relevant to the field of genetic counselling.
  - 2.0 FCEs in clinical practicums.
- Students spend a minimum of 21 months over a two-year period in full-time attendance.
- Students are required to complete an intervening summer rotation (six weeks duration).

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Molecular Genetics: Genetic Counselling
MSc Courses

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC2010Y</td>
<td>Molecular Medicine in Human Genetic Disease</td>
</tr>
<tr>
<td>MMG1120Y+</td>
<td>Clinical Rotations I</td>
</tr>
<tr>
<td>MMG1122Y</td>
<td>Issues in Genetic Counselling I</td>
</tr>
<tr>
<td>MMG1124Y</td>
<td>Principles of Effective Counselling</td>
</tr>
<tr>
<td>MMG1126Y</td>
<td>Clinical Issues in Pregnancy and Child Development</td>
</tr>
<tr>
<td>MMG1128Y</td>
<td>Risk Calculation and Research Methodology</td>
</tr>
<tr>
<td>MMG1130Y</td>
<td>Tutorial in Molecular Genetics</td>
</tr>
<tr>
<td>MMG1132H</td>
<td>Laboratory Skills</td>
</tr>
<tr>
<td>MMG1220Y</td>
<td>Clinical Rotations II</td>
</tr>
<tr>
<td>MMG1222Y</td>
<td>Issues in Genetic Counselling II</td>
</tr>
<tr>
<td>MMG1224Y</td>
<td>Advanced Principles of Effective Counselling</td>
</tr>
<tr>
<td>MMG1226Y</td>
<td>Concepts in Clinical Genetics</td>
</tr>
<tr>
<td>MMG1228Y</td>
<td>Independent Research Project</td>
</tr>
<tr>
<td>MMG1230H</td>
<td>Cancer Genetic Counselling</td>
</tr>
</tbody>
</table>

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
Molecular Genetics: Medical Genomics
MHSc

Master of Health Science

Program Description

The professional master’s program in Medical Genomics is a fast-paced, content-dense degree program delivered over five continuous sessions. This program will provide medical trainees, clinicians, research scientists, and laboratory professionals with the theory and practical knowledge necessary to incorporate the generation, analysis, and interpretation of genomics data into research and medical practice. Preferred applicants have relevant research and/or clinical experience and can demonstrate an immediate and substantive use of this degree in professional practice.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Molecular Genetics’ additional admission requirements stated below.

- An appropriate BSc degree with high academic standing from a recognized university, with a B+ average or better. Applicants would normally possess an undergraduate degree displaying competence in genetics, molecular biology, or related fields.

or

- An appropriate MD degree with high academic standing from a recognized university, with a B+ average or better.

- Applicants will complete an application package including:
  - all previous university transcripts
  - a transcript summary form for either the clinical or laboratory stream
  - curriculum vitae (CV)
  - statement of interest (one to two pages maximum), including how this program will have an impact on future career path
  - three letters of reference from professional, academic, or other qualified referees.

- Interview (15 minutes).

Program Requirements

Students must complete a total of 9.0 full-course equivalents (FCEs) as follows:

- Year 1:
  - MMG3001Y Advanced Human Genetics (2.0 FCEs, Fall and Winter)
  - MMG3002Y Biological Statistics (1.0 FCE, Fall)
  - MMG3003Y Genomics Methodologies (2.0 FCEs, Winter and Summer).

- Year 2:
  - MMG3004Y Communication of Genetic Information (1.0 FCE, Fall)
  - MMG3005Y Ethical and Legal Implications of Genomics (1.0 FCE, Fall)

  - MMG3007Y Clinical Practicum in Medical Genomics, an elective for clinical-stream students and trainees in patient-facing medical fields (1.0 FCE; Credit/No Credit, Winter)
  - or
  - MMG3008Y Practicum in Modern Genomics, an elective for laboratory professional-stream students in clinical/research science careers (1.0 FCE; Credit/No Credit, Winter).

- MMG3006Y Future Directions in Medical Genomics (1.0 FCE, Credit/No Credit).

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years

Course that may continue over a program. Credit is given when the course is completed.

Molecular Genetics: Medical Genomics
MHSc Courses

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMG3001Y</td>
<td>Advanced Human Genetics (2.0 FCEs)</td>
</tr>
<tr>
<td>MMG3002Y</td>
<td>Biological Statistics</td>
</tr>
<tr>
<td>MMG3003Y</td>
<td>Genomics Methodologies (2.0 FCEs)</td>
</tr>
<tr>
<td>MMG3004Y</td>
<td>Communication of Genetic Information</td>
</tr>
<tr>
<td>MMG3005Y</td>
<td>Ethical and Legal Implications of Genomics</td>
</tr>
<tr>
<td>MMG3006Y</td>
<td>Future Directions in Medical Genomics (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Required Elective (choose one)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMG3007Y</td>
<td>Clinical Practicum in Medical Genomics (Credit/No Credit)</td>
</tr>
<tr>
<td>MMG3008Y</td>
<td>Practicum in Modern Genomics (Credit/No Credit)</td>
</tr>
</tbody>
</table>
Molecular Genetics: Molecular Genetics

Master of Science

Program Description

The MSc program offers research training in a broad range of genetic systems from bacteria and viruses to humans. Research projects include DNA repair, recombination and segregation, transcription, RNA splicing and catalysis, regulation of gene expression, signal transduction, interactions of host cells with bacteria and viruses, developmental genetics of simple organisms (worms and fruit flies) as well as complex organisms (mice), molecular neurobiology, molecular immunology, cancer biology and virology, structural biology, and human genetics and gene therapy.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Molecular Genetics' additional admission requirements stated below.
- Normally, a BSc or MD degree or equivalent with excellent academic credentials in molecular biology, genetics, microbiology, and/or biochemistry. Applicants trained in other quantitative sciences (math, physics, chemistry, computer science, engineering, etc.) are also strongly encouraged to apply.

Program Requirements

- **Coursework.** Successful completion of 1.5 full-course equivalents (FCEs) as follows:
  - MMG1001H (0.5 FCE)
  - MMG1003H (0.25 FCE)
  - MMG1004H (0.25 FCE)
  - MMG1113H (0.25 FCE)
  - MMG1114H (0.25 FCE).
- Students must also attend each of the following graduate seminars two times:
  - MMG1111H (0.0 FCE; Credit/No Credit)
  - MMG1112H (0.0 FCE; Credit/No Credit).
- A thesis on a research project.
- Defence of the thesis at an oral examination.
- Residency. Students are required to spend 12 months in full-time attendance.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

Molecular Genetics: Molecular Genetics

Doctor of Philosophy

Program Description

The PhD program offers research training in a broad range of genetic systems from bacteria and viruses to humans. Research projects include DNA repair, recombination and segregation, transcription, RNA splicing and catalysis, regulation of gene expression, signal transduction, interactions of host cells with bacteria and viruses, developmental genetics of simple organisms (worms and fruit flies) as well as complex organisms (mice), molecular neurobiology, molecular immunology, cancer biology and virology, structural biology, and human genetics and gene therapy.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of a BSc, MD, or equivalent degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Molecular Genetics' additional admission requirements stated below.
- An MSc degree in Molecular Genetics, or equivalent, from the University of Toronto or another recognized university. As a condition of admission, applicants who have completed their MSc outside of the Department of Molecular Genetics may be required to complete additional course requirements.
- Normally, an MSc degree or equivalent with wet or dry lab experience related to molecular biology, genetics, microbiology, and/or biochemistry is required. Applicants trained in other quantitative sciences (math, physics, chemistry, computer science, engineering, etc.) are also strongly encouraged to apply.
- Attainment of minimum admission standards does not guarantee acceptance into the PhD program.

Program Requirements

- **Coursework.** Students must successfully complete a total of 1.0 full-course equivalent (FCEs) as follows:
  - MMG1115H (0.5 FCE)
  - Two modular courses (0.25 FCE each), which must be taken after successfully completing the qualifying examination prior to the Summer session of Year 4. If a program extension is granted beyond Year 4, students have until the Summer session of Year 5 to complete.
- Students must also attend each of the following graduate seminars four times:
  - MMG1111H (0.0 FCE; Credit/No Credit)
• A thesis on a research project.
• Successful completion of a qualification examination in Year 2. The qualifying exam consists of the submission of a written proposal and an oral examination. If a student is unsuccessful at the first attempt at the qualifying exam, there are three possible outcomes:
  o The student may retake the oral exam within four to eight weeks without revision of the written proposal; or
  o The student may submit a revised written proposal and retake the oral exam within four to eight weeks; or
  o The student may withdraw from the program after consultation with the Graduate Coordinator. In cases where the student does not have an MSc in Molecular Genetics, the Exam Committee may recommend the student reclassify into the MSc program.
• Residency. Students who enter the doctoral program after completing a master's program must spend a minimum of two sessions in full-time attendance.

Program Length
4 years

Time Limit
6 years

PhD Program (Transfer)

Transfer Requirements
• Transfer applicants must be enrolled in the Department of Molecular Genetics MSc program.
• Students must have successfully completed the following:
  o MMG1001H (0.5 FCE)
  o MMG1003H (0.25 FCE)
  o MMG1004H (0.25 FCE)
  o MMG1113H (0.25 FCE)
  o MMG1114H (0.25 FCE).
• Students must be enrolled in MMG1111H and MMG1112H in order to qualify to transfer to the PhD program.
• Transfer applicants must successfully complete a reclassification transfer exam within the first 24 months of registration in the MSc program.

Program Requirements
• Coursework. Students must successfully complete a total of 1.0 full-course equivalent (FCE) as follows:
  o MMG1115H (0.5 FCE)
  o Two modular courses (0.25 FCE each), which must be taken after successfully completing the transfer examination and prior to the Summer session of Year 5.
• Students must also attend any remaining graduate seminar sessions not completed prior to transferring. Students must attend each graduate seminar four times:
  o MMG1111H (0.0 FCE, Credit/No Credit)
  o MMG1112H (0.0 FCE, Credit/No Credit).
• Successful completion of a transfer examination in Year 2. The transfer exam consists of the submission of a written proposal and an oral examination. If a student is unsuccessful at the first attempt at the transfer exam, there are four possible outcomes:
  o The student may retake the oral exam within four to eight weeks without revision of the written proposal; or
  o The student may submit a revised written proposal and retake the oral exam within four to eight weeks; or
  o The student is asked to complete and defend an MSc thesis; or
  o The student may withdraw from the program after consultation with the Graduate Coordinator.
• Residency. Students who enter the doctoral program after completing a master's program must spend a minimum of two sessions in full-time attendance.

PhD Program (Direct-Entry)

Minimum Admission Requirements
• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Molecular Genetics' additional admission requirements stated below.
• Students with a BSc degree, an MD degree, or equivalent may be accepted directly into the PhD program.
• Normally, a BSc degree or equivalent with academic credentials and wet or dry lab experience related to molecular biology, genetics, microbiology, and/or biochemistry is required. Applicants trained in other quantitative sciences (math, physics, chemistry, computer science, engineering, etc.) are also strongly encouraged to apply.
• Attainment of minimum admission standards does not guarantee acceptance into the PhD program.

Program Requirements
• Coursework. Students must successfully complete a total of 2.5 full-course equivalents (FCEs) as follows:
  o MMG1001H (0.5 FCE)
  o MMG1003H (0.25 FCE)
  o MMG1004H (0.25 FCE)
  o MMG1113H (0.25 FCE)
  o MMG1114H (0.25 FCE)
  o MMG1115H (0.5 FCE)
  o Two modular courses (0.25 FCE each), which must be taken after successfully completing the qualifying examination and prior to the Summer session of Year 5.
• Students must also attend each of the following graduate seminars four times:
A thesis on a research project.

Successful completion of a qualification examination in Year 2. The qualifying exam consists of the submission of a written proposal and an oral examination. If a student is unsuccessful at the first attempt at the qualifying exam, there are four possible outcomes:

- The student may retake the oral exam within four to eight weeks without revision of the written proposal; or
- The student may submit a revised written proposal and retake the oral exam within four to eight weeks; or
- The student may choose to reclassify in the MSc program; or
- The student may withdraw from the program after consultation with the Graduate Coordinator.

Residency. Students who enter the doctoral program after completing a master's program must spend a minimum of two sessions in full-time attendance.

Program Length

5 years

Time Limit

7 years

Molecular Genetics: Molecular Genetics MSc, PhD Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBB1425H (0.5 FCE)</td>
<td>Structural Biology: Principles and Practice</td>
</tr>
<tr>
<td>JBB2025H (0.5 FCE)</td>
<td>Protein Crystallography</td>
</tr>
<tr>
<td>JDB1024Y (1.0 FCE)</td>
<td>Topics in Developmental Biology</td>
</tr>
<tr>
<td>JDB1025H (0.5 FCE)</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>JDB1026Y (1.0 FCE)</td>
<td>Student Seminars in Developmental Biology</td>
</tr>
<tr>
<td>MMG1001H (0.5 FCE)</td>
<td>Foundational Genetic Approaches I</td>
</tr>
<tr>
<td>MMG1003H (0.25 FCE)</td>
<td>First Year Colloquium</td>
</tr>
<tr>
<td>MMG1004H (0.25 FCE)</td>
<td>A Practical Course in Programming for Biologists</td>
</tr>
<tr>
<td>MMG1111H (0.0 FCE)</td>
<td>Graduate Seminars I (Credit/No Credit)</td>
</tr>
<tr>
<td>MMG1112H (0.0 FCE)</td>
<td>Graduate Seminars II (Credit/No Credit)</td>
</tr>
<tr>
<td>MMG1113H (0.25 FCE)</td>
<td>MSc Presentation Skills</td>
</tr>
<tr>
<td>MMG1114H (0.25 FCE)</td>
<td>MSc Presentation</td>
</tr>
<tr>
<td>MMG1115H (0.5 FCE)</td>
<td>PhD Presentation</td>
</tr>
<tr>
<td>MMG1301H (0.25 FCE)</td>
<td>Developmental Neurobiology</td>
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<tr>
<td>MMG1304H (0.25 FCE)</td>
<td>Bacterial Pathogens</td>
</tr>
<tr>
<td>MMG1319H (0.25 FCE)</td>
<td>Genomics of Infectious Diseases</td>
</tr>
<tr>
<td>MMG1324H (0.25 FCE)</td>
<td>Mitochondrial Genetics in Health and Disease</td>
</tr>
<tr>
<td>MMG1325H (0.25 FCE)</td>
<td>Molecular Mechanisms of Mood and Mind (M4)</td>
</tr>
<tr>
<td>MMG1326H (0.25 FCE)</td>
<td>Post-Transcriptional Regulatory Mechanisms</td>
</tr>
<tr>
<td>MMG1331H (0.25 FCE)</td>
<td>Stem Cells II</td>
</tr>
<tr>
<td>MMG1333H (0.25 FCE)</td>
<td>Virus Replication</td>
</tr>
<tr>
<td>MMG1344H (0.25 FCE)</td>
<td>Foundational Computational Biology I (exclusion: MMG1004H)</td>
</tr>
<tr>
<td>MMG1345H (0.25 FCE)</td>
<td>Foundational Computational Biology II (exclusion: MMG1004H)</td>
</tr>
<tr>
<td>MMG1425H (0.5 FCE)</td>
<td>Signal Transduction and Cell Cycle Regulation</td>
</tr>
<tr>
<td>MMG1451H (0.5 FCE)</td>
<td>Genetic Analysis of Development: Yeast and Worms</td>
</tr>
</tbody>
</table>
Music

Music: Introduction

Faculty Affiliation

Music

Degree Programs

Music

MA and PhD

- Fields:
  - Ethnomusicology;
  - Music and Health Sciences;
  - Music Education;
  - Musicology;
  - Music Theory

Music Performance

MMus

- Fields:
  - Applied Music and Health;
  - Collaborative Piano;
  - Composition;
  - Conducting;
  - Historical Performance;
  - Instrumental;
  - Jazz;
  - Music Technology and Digital Media;
  - Opera;
  - Piano Pedagogy;
  - Vocal;
  - Vocal Pedagogy

DMA

- Fields:
  - Composition;
  - Performance

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Environment and Health
  - Music, MA, MMus, PhD
- Jewish Studies
  - Music, MA, PhD
- Neuroscience
  - Music, MA, PhD
- Sexuality Studies
  - Music, MA, PhD
- South Asian Studies
  - Music, MA, PhD

Overview

A taught graduate degree program at the Faculty of Music was inaugurated in 1954. The Faculty of Music currently offers graduate degrees in 17 areas of concentration and fosters the institutional alliance of all areas of advanced music study. Graduate degrees are offered at both master's and doctoral levels in areas such as composition, ethnomusicology, music education, musicology, and performance. Graduates from all areas of the program occupy leading positions in music departments across Canada and around the world.

Contact and Address

Web: music.utoronto.ca
Email: grad.music@utoronto.ca
Telephone: (416) 978-5772
Fax: (416) 946-3353

Graduate Department of Music
University of Toronto
Edward Johnson Building
80 Queen's Park Crescent
Toronto, Ontario M5S 2C5
Canada

Music: Graduate Faculty

Full Members

Albano, Michael
Apfelstadt, Hilary - PhD
Bartel, Lee - BA, BMus, MEd, PhD
Bowen, William - BA, BMus, MA, PhD
Britton, Eliot - PhD
Clark, Caryl - BMus, MA, PhD
Dolloff, Lori Anne - MusB, PhD
Edwards, Darryl - BEd, BMus, MMus, DMA
Elliott, Robin - BMus, MA, PhD
Gould, Elizabeth - BM, MA, MusDoc
Gutsche-Miller, Sarah - PhD
Haines, John - BSc, BA, MA, PhD
Hatzis, Christos - MusM, PhD
Hemmasi, Farzaneh - PhD
Horst, Sandra - BMus, MM
Huang, Aiyun - DMA
Koga, Midori - BMus, AA, MMus, DMA
Komisaruk, Kevin - BMus, MMus, MusDoc
Applicants to the MA in Music, Ethnomusicology field are accepted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.

- Applicants must submit an essay representative of their work in music history or ethnomusicology.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MUS1000H Introduction to Music Research I in Year 1
  - 0.5 FCE: MUS1002H Fieldwork Methods and Practicum, offered in alternate years
  - 3.5 of the 6.0 FCEs must be in the discipline; this includes MUS1000H
  - Up to 1.0 FCE may be taken outside of Musicology, Ethnomusicology, or Music Theory (either in the Graduate Department of Music or another graduate unit) with approval of the course and program advising committee.
  - The primary means of evaluating quality are research essays and seminar presentations. MUS1990H MA Major Paper or Project is optional.

- A course and program advising (CPA) committee will review course selections. The CPA committee will ensure course selections meet the program requirements and are appropriate to the field.

- Students must maintain a minimum average of A– in Year 1 of the program in order to progress to Year 2.

- One language other than English is required: this should be relevant to a student's musical and scholarly interests. The chosen language must be approved by the department. Students are strongly encouraged to complete the language requirement in Year 1.
Music courses in music therapy, psychology, kinesiology, and/or rehabilitation science are preferred. Applicants whose undergraduate degree does not meet this standard may be required to take appropriate prerequisite courses.

- Selected applicants will be scheduled for an interview. Depending on circumstances, an assigned essay may be substituted for the interview with faculty approval.
- Two letters of reference commenting on the applicant’s professional performance and promise.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents [FCEs] as follows:
  - Required courses (3.0 FCEs)
    - One of the following quantitative methods research courses (0.5 FCE), approved by the advisor:
      - CHL5201H Biostatistics I
      - JOI1287H Introduction to Applied Statistics
      - NUR1075H Introductory Statistics for Health Sciences Research
      - REH1120H Research Methods for Rehabilitation
    - MUS7110H Neurosciences of Music: Scientific Foundations, Clinical Translations (0.5 FCE)
    - MUS7412H Elementary Improvisation Methods (0.5 FCE)
    - Three of the following courses (1.5 FCEs) or other course(s) as approved by the department:
      - MUS4248H Optimizing the Singing Mind
      - MUS4613H Performance Techniques for Hospice Palliative Care
      - MUS7400H Introduction to Music and Health Care
      - MUS7406H Music Psychology
      - MUS7407H Clinical Research Practicum
      - MUS7415H Topics in Music and Health I
      - MUS7416H Topics in Music and Health II
  - Elective courses (1.0 FCE) from health-related music courses or from health-related departments as approved by the advisor. Students may choose to enrol in a recommended collaborative specialization during their study, such as the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course or the Collaborative Specialization in Neuroscience. The course(s) taken as part of the collaborative specialization may count towards this elective requirement.
- All students are assigned a faculty advisor.
- Students must pass, by the end of Year 1, a comprehensive examination (oral) in music and health, based on four selected essays representing a cohesive research direction. Two attempts to complete the exam are permitted. If the second attempt is unsuccessful, the department will recommend termination of the student’s program.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Course that may continue over a program. The course is graded when completed.

Music: Music MA; Field: Music Education

Master of Arts (Field: Music Education)

Students may complete the degree program full-time or part-time.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.
- Bachelor of Music degree in Music Education from the University of Toronto with an average standing of mid-B or better over the final two years, or an equivalent program and standing from another recognized university. Applicants whose undergraduate degree does not meet this standard may be required to take appropriate prerequisite courses.
- Applicants will normally have two years of teaching experience, although this requirement may be waived at the discretion of the department.
- An interview with the Music Education faculty must be scheduled whenever possible. With faculty approval, an assigned essay may be substituted for the interview.
- Appropriate letters of reference commenting on professional performance and promise are also required.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - A minimum of 2.5 FCEs in Music Education, including MUS2111H Introduction to Research in Music Education and MUS2151H Philosophy and Music Education.
  - Elective courses may be chosen from the MA/PhD/MMus/DMA courses of instruction and/or other graduate courses available in the University, subject to the approval of the department.
  - A major essay (MUS2990Y) may be substituted for 1.0 FCE with the approval of the department.
- Pass a comprehensive examination in music education (written and oral). Students must successfully complete the comprehensive exam by the end of Year 1. Students are permitted two attempts to complete the exam. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 6 sessions part-time
Time Limit

3 years full-time;
6 years part-time

Course that may continue over a program. The course is graded when completed.

Music: Music MA; Field: Musicology

Master of Arts (Field: Musicology)

Minimum Admission Requirements

- Applicants to the MA in Music, Musicology field are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- An appropriate Bachelor of Arts specialist degree or Bachelor of Music degree from a recognized university, with an average standing equivalent to a University of Toronto mid-B or better over the final two years. Applicants whose undergraduate degrees do not meet this standard may be required to take up to a full year of prerequisite courses.
- Applicants must submit an essay representative of their work in music history.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MUS1000H Introduction to Music Research I in Year 1.
  - 3.0 of the 6.0 FCEs must be in the discipline; this includes MUS1000H.
  - Up to 1.0 FCE may be taken outside of Musicology, Ethnomusicology, or Music Theory (either in the Graduate Department of Music or another graduate unit) with approval of the course and program advising (CPA) committee.
  - The primary means of evaluating quality are research essays and seminar presentations. MUS1990H MA Major Paper or Project is optional.
  - A CPA committee will review course selections. The CPA committee will ensure course selections meet the program requirements and are appropriate to the field.
- One language other than English is required. The default language at the MA level is German. Students may petition to substitute another language if it is more relevant to their research. Petitions must be submitted to the Division Head (Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office.

Students can fulfil the language requirement in one of the following three ways:
  - Complete GER300H at U of T or its equivalent from another university with a minimum grade of B+; or
  - Complete GER6000H; or
  - Pass a proficiency exam set by the Division.

- Students must maintain a minimum average of A– in Year 1 in order to progress to Year 2.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Music: Music MA; Field: Music Theory

Master of Arts (Field: Music Theory)

Minimum Admission Requirements

- Applicants to the MA in Music, Music Theory field are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- An appropriate Bachelor of Arts specialist degree or Bachelor of Music degree from a recognized university, with an average standing equivalent to a University of Toronto mid-B or better over the final two years. Applicants whose undergraduate degrees do not meet this standard may be required to take up to a full year of prerequisite courses.
- Applicants must submit an essay that represents their work in music theory.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MUS1000H Introduction to Music Research I in Year 1.
  - A minimum of 3.0 FCEs in graduate courses in music theory; at least two of these (2.0 FCEs) must be graduate-only seminars.
  - Up to 1.0 FCE may be taken outside of musicology, ethnomusicology, and music theory (either in the Graduate Department of Music or another graduate unit) with approval of the department.
  - MUS1990H MA Major Paper or Project (0.5 FCE) is optional.
  - A course and program advising (CPA) committee will review course selections. The CPA committee will ensure course selections meet the requirements of the program and are appropriate to the field.
- One language other than English is required. The default language at the MA level is German. Students may petition to substitute another language if it is more relevant to their research. Petitions must be submitted to the Division Head (Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office.

Students can fulfil the language requirement in one of the following three ways:
  - Complete GER300H at U of T or its equivalent from another university with a minimum grade of B+; or
• Complete GER6000H; or
• Pass a proficiency exam set by the Division.

Students must maintain a minimum average of A– in Year 1 in order to progress to Year 2.

Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years full-time

Music: Music PhD; Field: Ethnomusicology

Doctor of Philosophy (Field: Ethnomusicology)

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry following completion an appropriate bachelor’s degree.

PhD Program

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.

• The PhD in Music, Ethnomusicology field is a research degree. Applicants must hold a master's degree with specialization in ethnomusicology, musicology, or music theory, but may also be in a cognate field such as anthropology or cultural studies. Applicants must have an average standing of B+ or better.

• An essay of approximately 3,000 words which demonstrates their ability to handle a research problem.

• Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

• Coursework. Students holding a master's degree specializing in musicology, ethnomusicology, or theory must fulfill the following requirements by the end of Year 2:

  o 3.0 full-course equivalents (FCEs) as follows:
    ▪ 0.5 FCE: MUS1250H PhD Seminar, taken in the first session
    ▪ 0.5 FCE: MUS1997H0 Research in Ethnomusicology
    ▪ 1.0 FCE in graduate-only seminars in ethnomusicology
    ▪ 1.0 FCE in electives, of which 0.5 FCE may be taken outside of musicology, ethnomusicology, and music theory (either in the Graduate Department of Music or another graduate unit). With approval from the course and program advising (CPA) committee, one 0.5 FCE course may be deferred to the first session of Year 2.

  • Coursework should be completed during Year 1 with an average grade of at least A–. The exception is MUS1997H0 Research in Ethnomusicology, which lays the groundwork for the field examination and the dissertation: this course must be started at the beginning of the second session of Year 1 and completed by the end of the first session of Year 2.

  • The CPA committee will review course selections to ensure that they meet the requirements of the program and are appropriate to the field. The department may prescribe additional courses if it is felt they are necessary to develop the knowledge and skills required for a student's proposed subject of study.

• Advanced oral and reading knowledge of a language other than English is required: this should be relevant to a student's musical and scholarly interests. The department may also require competence in additional languages deemed necessary for a proposed area of research. Language requirements must be completed successfully by the end of Year 2.

• Supervisor. During Year 1, students are expected to discuss their interests, expectations, and research objectives with faculty members. An appropriate supervisor of MUS1997H0 must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS1997H0, which will include a research paper.

• A set of three comprehensive exams in (1) contemporary issues, (2) history of the field, and (3) repertoire, to be taken at the beginning of Year 2.

  • Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.

• Students must prepare a thesis and will defend it at a Doctoral Final Oral Examination.

• The residency requirement for all students is three years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length
4 years

Time Limit
6 years

0 Course that may continue over a program. The course is graded when completed.
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- The PhD in Music, Ethnomusicology field is a research degree. Exceptional students may be admitted directly to the doctoral stream with an appropriate bachelor's degree (direct entry). Applicants must have an average standing of A– or better.
- An essay of approximately 3,000 words which demonstrates their ability to handle a research problem.
- Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

- **Coursework.** Students must complete **6.0 full-course equivalents (FCEs)** as follows:
  - Year 1: complete **3.0 FCEs**, exclusive of MUS1250H and MUS1997H. Students must maintain an average grade of at least A– in order to continue with the doctorate; otherwise, the student will be required to transfer into the master’s program. Successful direct entry students go on to Year 2.
  - Years 2 and 3: **3.0 FCEs** as follows:
    - 0.5 FCE: MUS1250H PhD Seminar, taken in the first session of Year 2.
    - 0.5 FCE: MUS1997H Research in Ethnomusicology lays the groundwork for the field examination and the dissertation. This course must be started at the beginning of the second session of Year 2 and completed by the end of the first session of Year 3.
    - 1.0 FCE in graduate-only seminars in ethnomusicology.
    - 1.0 FCE in electives, of which 0.5 FCE may be taken outside of musicology, ethnomusicology, and music theory (either in the Graduate Department of Music or another graduate unit). With approval from the course and program advising (CPA) committee, one 0.5 FCE course may be deferred to the first session of Year 2.
- All course requirements must be completed by the end of Year 3.
  - The CPA committee will review course selections to ensure that they meet the requirements of the program and are appropriate to the field. The department may prescribe additional courses if it is felt they are necessary to develop the knowledge and skills required for a student's proposed subject of study.
- Students must complete an intermediate-level **language examination** in Year 1. Advanced oral and reading knowledge of a language other than English is required: this should be relevant to the student's musical and scholarly interests. The department may also require competence in additional languages deemed necessary for a proposed area of research. Language requirements must be completed successfully by the end of Year 3.
- **Supervisor.** During Year 1, students are expected to discuss their interests, expectations, and research objectives with faculty members. An appropriate supervisor of MUS1997H must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS1997H, which will include a research paper.
  - A set of **three comprehensive exams** in (1) contemporary issues, (2) history of the field, and (3) repertoire, to be taken at the beginning of Year 3.
  - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
  - Students must prepare a **thesis** and will defend it at a Doctoral Final Oral Examination.
  - The **residency** requirement for all students is three years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

- 5 years

Time Limit

- 7 years

Music: Music PhD; Field: Music and Health Sciences

Doctor of Philosophy (Field: Music and Health Sciences)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants must hold a four-year bachelor’s degree, either in music (or with a musical credential [e.g., ARCT]) or music therapy, plus a field-related master’s degree (e.g., master of music, master of music therapy, master's degree in a health field such as kinesiology, neuroscience, or speech-language pathology). Applicants must have a standing of B+ or better, from the University of Toronto, or an equivalent degree and standing from another recognized university.
  - An interview with Music and Health faculty members whenever possible. With faculty approval, an assigned essay may be substituted for the interview.
- Appropriate letters of reference commenting on the applicant’s professional experience and academic ability.
Program Requirements

- **Coursework.** Students must complete **6.0 full-course equivalents (FCEs)** as follows:
  - Required courses (4.0 FCEs):
    - MUS7995Y0 *Music and Health Doctoral Research Project* (1.0 FCE)
    - Two of the following quantitative methods research courses (1.0 FCE), approved by the advisor:
      - CHL5201H *Biostatistics I*
      - NUR1075H *Introductory Statistics for Health Sciences Research*
      - REH1120H *Research Methods for Rehabilitation*
      - JOI1287H *Introduction to Applied Statistics*
    - Four of the following courses (2.0 FCEs) or other course(s) as approved by the department:
      - MUS4248H *Optimizing the Singing Mind*
      - MUS4613H *Performance Techniques for Hospice Palliative Care*
      - MUS7110H *Neurosciences of Music: Scientific Foundations, Clinical Translations*
      - MUS7406H *Music Psychology*
      - MUS7407H *Clinical Research Practicum*
      - MUS7412H *Elementary Improvisation Methods*
      - MUS7415H *Topics in Music and Health I*
      - MUS7416H *Topics in Music and Health II*
  - Elective courses (2.0 FCEs) from the Faculty of Music or related departments as approved by the advisor.

- **Residence.** Students must be registered full-time, on campus for a minimum of six sessions, in order to be in such geographical proximity as to be able to participate fully in the department's activities associated with the program.

- **Language requirements,** if any, will be established by the student's advisory committee, based on specific research needs.

- **Supervision.** As early as possible in Year 2, the student will submit a thesis proposal that must be approved by the end of that year. On approval of the proposal by the Music and Health Sciences division, a principal advisor and an advisory committee of at least three members (including the advisor as chair) will be appointed. The committee will meet with the student at least two times each academic year.

- Students must complete a **comprehensive examination** successfully by the end of Year 2. Students are permitted two attempts to complete the exam. If the second attempt is unsuccessful, the department will recommend termination of the student's program.

- **Thesis.** Upon successful completion of the field examination, the candidate proceeds to complete an oral defence of the thesis proposal, a thesis, and an oral defence of the thesis.

- Following successful completion of the comprehensive exam, a **thesis supervisory committee** is formed. The committee membership must be approved by the Academic Dean of Graduate Studies and should include at least one member from the Faculty of Music. The supervisor may be from an appropriate department. The supervisory committee must approve the thesis proposal. Thesis research involving facilities or research participants in other departments (e.g., fMRI scanning or use of hospital patients) must be approved by the Director of the Music and Health Research Collaboratory (MaHRC).

### Program Length

- **4 years full-time**

### Time Limit

- **6 years full-time**

° Course that may continue over a program. The course is graded when completed.

### Music: Music PhD; Field: Music Education

#### Doctor of Philosophy (Field: Music Education)

The PhD program in Music, Music Education field may be completed as a full-time program or a flexible-time program.

### PhD Program

#### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants must hold a master's degree specializing in Music Education from the University of Toronto with an average standing of B+ or better, or an equivalent degree and standing from another recognized university.
- An interview with the Music Education faculty must be scheduled whenever possible.
- An assigned essay may be substituted for the interview with faculty approval.
- At the discretion of the faculty, applicants may be required to provide a videotape of their teaching expertise.
- Appropriate letters of reference commenting on the applicant's teaching experience, music performance ability, and academic ability.

### Program Requirements

- **Coursework.** Students must complete **6.0 full-course equivalents (FCEs)** including:
  - At least 2.0 FCEs (including MUS2995Y0 *Music Education Doctoral Research Project*) must be taken from the departmental offerings in music education.
  - The balance of the student's required program must be approved by the department and may include courses from the MA/MMus/PhD/DMA list and/or from another graduate unit.
Music

Minimum Admission Requirements

- The flexible-time option is offered to practising professionals whose employment or other professional work is related to their research or study interests.
- Applicants to the flexible-time PhD program option must apply specifically to this program to be considered.
- The admission, course, and degree requirements for the flexible-time option are identical to those listed for the full-time PhD program.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants must hold a master's degree specializing in Music Education from the University of Toronto with an average standing of B+ or better, or an equivalent degree and standing from another recognized university.

- At the department's discretion, the student may receive credit for up to 3.0 FCEs from an acceptable master's degree program.

- Residence. Students must be registered full-time and on campus full-time for two years in order to be in such geographical proximity to be able to participate fully in the department's activities associated with the program.
- Language requirements, if any, will be established by the student's advisory committee, based on specific research needs.
- Supervision. As early as possible in Year 2, the student will submit a thesis proposal which must be approved by the end of that year. On approval of the proposal by the Music Education division of the department, a principal advisor and an advisory committee of at least three members (including the advisor as chair) will be appointed. The committee will meet with the student at least two times each academic year.
- Students must successfully complete a comprehensive exam by the end of Year 2. Students are permitted two attempts to complete the exam. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
- Thesis. Upon successful completion of the comprehensive examination, the candidate proceeds to complete an oral defence of the thesis proposal, a thesis, and an oral defence of the thesis.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) including:
  - At least 2.0 FCEs (including MUS2995Y0 Music Education Doctoral Research Project) must be taken from the departmental offerings in music education.
  - The balance of the student's required program must be approved by the department and may include courses from the MA/MMus/PhD/DMA list and/or from another graduate unit.
  - At the department's discretion, the student may receive credit for up to 3.0 FCEs from an acceptable master's degree program.

- Residence. Students must be registered full-time and on campus full-time for two years in order to be in such geographical proximity to be able to participate fully in the department's activities associated with the program.
- Language requirements, if any, will be established by the student's advisory committee, based on specific research needs.
- Supervision. As early as possible in Year 2, the student will submit a thesis proposal which must be approved by the end of that year. On approval of the proposal by the Music Education division of the department, a principal advisor and an advisory committee of at least three members (including the advisor as chair) will be appointed. The committee will meet with the student at least two times each academic year.
- Students must successfully complete a comprehensive exam by the end of Year 2. Students are permitted two attempts to complete the exam. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
- Thesis. Upon successful completion of the comprehensive examination, the candidate proceeds to complete an oral defence of the thesis proposal, a thesis, and an oral defence of the thesis.
- As governed by University of Toronto regulations, flexible-time students must be registered full-time and pay full-time fees for four years, and may apply to be registered part-time thereafter. The program requirements will be the same as those required for the full-time PhD. The difference is that students enrolled in the flexible-time PhD will have the flexibility of a part-time course load and will have an overall time limit to completion of eight years.

Program Length

4 years full-time

Time Limit

6 years full-time

Course that may continue over a program. The course is graded when completed.

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants to the flexible-time PhD program option must apply specifically to this program to be considered.
- The admission, course, and degree requirements for the flexible-time option are identical to those listed for the full-time PhD program.
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants must hold a master's degree specializing in Music Education from the University of Toronto with an average standing of B+ or better, or an equivalent degree and standing from another recognized university.

- An interview with the Music Education faculty must be scheduled whenever possible.
- An assigned essay may be substituted for the interview with faculty approval.
- At the discretion of the faculty, applicants may be required to provide a videotape of their teaching expertise.
- Appropriate letters of reference commenting on the applicant's teaching experience, music performance ability, and academic ability.
- Students who are considering the flexible-time PhD should ensure that they have adequate time on campus to attend classes and to fulfill the academic requirements of a PhD program.

Program Length

6 years
Music: Music PhD; Field: Musicology

Doctor of Philosophy (Field: Musicology)

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master's degree or 2) direct entry following completion an appropriate bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- The PhD in Music, Musicology field is a research degree. Applicants must hold a master's degree with specialization in musicology, ethnomusicology, or theory, and must have an average standing of B+ or better.
- Applicants must submit an essay of approximately 3,000 words which demonstrates their ability to handle a research problem.
- Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

- Coursework. Students holding a master’s degree specializing in musicology, ethnomusicology, or theory must fulfill the following requirements:
  - A minimum of 3.0 full-course equivalents (FCEs) as follows:
    - 0.5 FCE: MUS1250H PhD Seminar is taken in the first session
    - 0.5 FCE: MUS1999H® Research in Musicology
    - 1.0 FCE in graduate-only seminars in musicology
    - 1.0 FCE in electives, of which 0.5 FCE may be taken outside of Musicology, Ethnomusicology, and Music Theory (either in the Graduate Department of Music or another graduate unit). With approval from the CPA committee, one 0.5 FCE course may be deferred to the first session of Year 2.
  - Coursework should be completed during Year 1 with an average grade of at least A–. The exception is MUS1999H®, which lays the groundwork for the field examination and the dissertation: this course must be started at the beginning of the second session of Year 1 and completed by the end of the first session of Year 2.
- A course and program advising (CPA) committee will review course selections. The CPA committee will ensure course selections meet the requirements of the program and are appropriate to the field. Students may be required to take additional courses or acquire other skills to meet the needs of their proposed subjects of study.
- A set of three (written) comprehensive exams in (1) contemporary issues, (2) history of the field, and (3) repertoire, to be taken at the beginning of Year 2.
  - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
- Two research languages in addition to English are required: one secondary and one primary. The goal is to have all language requirements fulfilled by the end of Year 2.
  - The secondary language requirement is the same as the MA language requirement. The default language for the secondary language requirement is German. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete GER300H at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Complete GER6000H; or
    - Pass a proficiency exam set by the Division.
  - Students who have fulfilled the MA language requirement at U of T may count this as the secondary language or use it as a stepping stone towards the primary language. Students are expected to complete the secondary language requirement by the end of Year 1.
  - The primary language requirement involves advanced reading proficiency in the chosen language. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete a 400-level language course at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Pass a proficiency exam set by the Division; or
    - Pass an exam in another graduate unit by arrangement through the Graduate Department of Music.
- Students are allowed two attempts at the in-house exam, after which they must take a language course at the appropriate MA or PhD level. All language requirements must be completed by the end of Year 3. Exceptions are granted only in extenuating circumstances and by petition.
- Students must prepare a thesis under the direction of an advisor and a committee and will defend it at a Doctoral Final Oral Examination. The thesis, including bibliography and appendices, should ideally be between 75,000 and 80,000 words in length. The department will not consider a thesis that exceeds 100,000 words.
The residency requirement for all students is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- The PhD in Music, Musicology field is a research degree. Exceptional students may be admitted directly to the doctoral stream with an appropriate bachelor's degree (direct entry). Applicants must have an average standing of A– or better.
- Applicants must submit an essay of approximately 3,000 words which demonstrates their ability to handle a research problem.
- Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 3.0 FCEs at the graduate level in Year 1 with a minimum average of A–. The exception is MUS1999H⁶, which lays the groundwork for the field examination and the dissertation: this course must be started at the beginning of the second session of Year 1 and completed by the end of the first session of Year 2.
  - An intermediate-level language exam in Year 1. All language requirements must be completed by Year 3.
  - Following successful completion of Year 1, students must then complete all program requirements of the four-year PhD program.
  - 0.5 FCE: MUS1250H PhD Seminar, taken in the first session of Year 2.
  - 0.5 FCE: MUS1999H⁶ Research in Musicology.
  - 1.0 FCE in graduate-only seminars in musicology.
  - 1.0 FCE in electives, of which 0.5 FCE may be taken outside of Musicology, Ethnomusicology, and Music Theory (either in the Graduate Department of Music or another graduate unit). With approval from the course and program advising (CPA) committee, one 0.5 FCE course may be deferred to the first session of Year 2.
  - The CPA committee will review course selections, ensuring that course selections meet the requirements of the program and are appropriate to the field.

Students may be required to take additional courses or acquire other skills to meet the needs of their proposed subjects of study.
- A set of three (written) comprehensive exams in (1) contemporary issues, (2) history of the field, and (3) repertoire, to be taken at the beginning of Year 3.
  - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If students are unsuccessful in their second attempt at the comprehensive exam, the department will make a recommendation for program termination.
- Two research languages in addition to English are required: one secondary and one primary. The goal is to have all language requirements fulfilled by the end of Year 2.
  - The secondary language requirement is the same as the MA language requirement. The default language for the secondary language requirement is German. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete GER300H at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Complete GER600H; or
    - Pass a proficiency exam set by the Division.
  - Students who have fulfilled the MA language requirement at U of T may count this as the secondary language or use it as a stepping stone towards the primary language. Students are expected to complete the secondary language requirement by the end of Year 1.
  - The primary language requirement involves advanced reading proficiency in the chosen language. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete a 400-level language course at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Pass a proficiency exam set by the Division; or
    - Pass an exam in another graduate unit by arrangement through the Graduate Department of Music.

- Students are allowed two attempts at the in-house exam, after which they must take a language course at the appropriate MA or PhD level. All language requirements must be completed by the end of Year 3. Exceptions are granted only in extenuating circumstances and by petition.
- Students must prepare a thesis under the direction of an advisor and a committee and will defend it at a Doctoral Final Oral Examination. The thesis, including bibliography and appendices, should ideally be between 75,000 and 80,000 words in length. The department will not consider a thesis that exceeds 100,000 words.
- The residency requirement for all students is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.
Music: Music PhD; Field: Music Theory

Doctor of Philosophy (Field: Music Theory)

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry following completion a bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- The PhD in Music, Music Theory field is a research degree. Applicants must hold a master’s degree with appropriate specialization (normally music theory or musicology), and must have an average standing of B+ or better.
- Applicants must submit an essay of approximately 3,000 words pertaining to music theory and which demonstrates their ability to handle a research problem.
- Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

- Coursework. Students must complete of a minimum of 3.0 full-course equivalents (FCEs) including:
  - 0.5 FCE: MUS1250H PhD Seminar (taken in the first session).
  - 0.5 FCE: MUS3997H0 Research in Music Theory.
  - 1.0 FCE in graduate-only seminars in music theory.
  - 1.0 FCE in electives, of which 0.5 FCE may be taken outside of musicology, ethnomusicology, and music theory (either in the Graduate Department of Music or another graduate unit). With approval from the CPA committee, one 0.5 FCE course may be deferred to the first session of Year 2.
  - Coursework should be completed during Year 1 with an average grade of at least A–. The exception is MUS3997H0 Research in Music Theory, which lays the groundwork for the field examination and dissertation: this course must be started at the beginning of the second session of Year 1 and completed by the end of the first session of Year 2.
  - Students may be required to take additional courses or acquire other skills to meet the needs of their proposed subjects of study.
  - A course and program advising (CPA) committee will review course selections. The CPA committee will ensure course selections meet the requirements of the program and are appropriate to the field.
- A set of three (written) comprehensive exams in (1) history of the field; (2) current issues in the field; and (3) repertoire and analysis, to be taken at the beginning of Year 2.
  - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If the second attempt is unsuccessful, the department will recommend termination of the student's program.
- Two research languages in addition to English are required: one secondary and one primary. The goal is to have all language requirements fulfilled by the end of Year 2.
  - The secondary language requirement is the same as the MA language requirement. The default language for the secondary language requirement is German. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete GER300H at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Complete GER6000H; or
    - Pass a proficiency exam set by the Division.
  - Students who have fulfilled the MA language requirement at U of T may count this as the secondary language or use it as a stepping stone towards the primary language. Students are expected to complete the secondary language requirement by the end of Year 1.
  - The primary language requirement involves advanced reading proficiency in the chosen language. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office. Students can fulfill the primary language requirement in one of the following three ways:
    - Complete a 400-level language course at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Pass a proficiency exam set by the Division; or
    - Pass an exam in another graduate unit by arrangement through the Graduate Department of Music.
  - Students are allowed two attempts at the in-house exam, after which they must take a language course at the appropriate MA or PhD level. All language requirements must be completed by the end of Year 3. Exceptions are granted only in extenuating circumstances and by petition.
  - Students must prepare a thesis under the direction of an advisor and a committee and will defend it at a Doctoral Final Oral Examination. The thesis, including bibliography and appendices, should ideally be between 75,000 and 80,000 words in length. The department will not consider a thesis that exceeds 100,000 words.
The residency requirement for all students is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.
- The PhD in Music, Music Theory field is a research degree. Exceptional students may be admitted directly to the doctoral stream with an appropriate four-year University of Toronto bachelor’s degree (normally in music theory or musicology), or its equivalent from a recognized university, with at least an A– average in courses.
- Applicants must submit an essay of approximately 3,000 words pertaining to music theory and which demonstrates their ability to handle a research problem.
- Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

- Coursework. Students must complete 6.0 full-course equivalents (FCEs) as follows:
  - 3.0 FCEs at the graduate level in Year 1 with a minimum average of A–. The exception is MUS3997H0 Research in Music Theory, which lays the groundwork for the field examination and dissertation: this course must be started at the beginning of the second session of Year 1 and completed by the end of the first session of Year 2.
  - An intermediate-level language exam in Year 1. All language requirements must be completed by Year 3.
  - Following successful completion of Year 1, students must then complete all program requirements of the four-year PhD program.
  - 0.5 FCE: MUS1250H PhD Seminar, taken in the first session of Year 2.
  - 0.5 FCE: MUS3997H0 Research in Music Theory.
  - 1.0 FCE in graduate-only seminars in music theory.
  - 1.0 FCE in electives, of which 0.5 FCE may be taken outside of musicology, ethnomusicology, and music theory (either in the Graduate Department of Music or another graduate unit). With approval from the CPA committee, one 0.5 FCE course may be deferred to the first session of Year 2.
  - Students may be required to take additional courses or acquire other skills to meet the needs of their proposed subjects of study.
  - A course and program advising (CPA) committee will review course selections. The CPA committee will ensure course selections meet the requirements of the program and are appropriate to the field.

- A set of three (written) comprehensive exams in (1) history of the field; (2) current issues in the field; and (3) repertoire and analysis, to be taken at the beginning of Year 3.
  - Students are permitted two attempts to complete each exam. A second attempt must take place at the beginning of the second session. If the second attempt is unsuccessful, the department will recommend termination of the student’s program.

- Two research languages in addition to English are required: one secondary and one primary. The goal is to have all language requirements fulfilled by the end of Year 2.
  - The secondary language requirement is the same as the MA language requirement. The default language for the secondary language requirement is German. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Students can fulfill the secondary language requirement in one of the following three ways:
    - Complete GER300H at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Complete GER600H; or
    - Pass a proficiency exam set by the Division.
  - Students who have fulfilled the MA language requirement at U of T may count this as the secondary language or use it as a stepping stone towards the primary language. Students are expected to complete the secondary language requirement by the end of Year 1.
  - The primary language requirement involves advanced reading proficiency in the chosen language. Students who wish to choose languages other than German must submit a petition to the Division Head (either Musicology or Music Theory) by the end of the first session of Year 1. Information on petitioning is available at the Faculty of Music Graduate Studies Office. Students can fulfill the primary language requirement in one of the following three ways:
    - Complete a 400-level language course at U of T or its equivalent from another university, with a minimum grade of B+; or
    - Pass a proficiency exam set by the Division; or
    - Pass an exam in another graduate unit by arrangement through the Graduate Department of Music.

- Students are allowed two attempts at the in-house exam, after which they must take a language course at the appropriate MA or PhD level. All language requirements must be completed by the end of Year 3. Exceptions are granted only in extenuating circumstances and by petition.

- Students must prepare a thesis under the direction of an advisor and a committee and will defend it at a Doctoral Final Oral Examination. The thesis, including bibliography and appendices, should ideally be between 75,000 and 80,000 words in length. The department will not consider a thesis that exceeds 100,000 words.
• The residency requirement for all students is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

5 years

Time Limit

7 years

Music: Music MA, PhD; Fields: Ethnomusicology and Musicology Courses

Final course offerings may vary. Students should consult the departmental handbook.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS1000H</td>
<td>Introduction to Music Research I</td>
</tr>
<tr>
<td>MUS1002H</td>
<td>Fieldwork Methods and Practicum</td>
</tr>
<tr>
<td>MUS1042H</td>
<td>The Ballets Russes</td>
</tr>
<tr>
<td>MUS1055H</td>
<td>Oratorio</td>
</tr>
<tr>
<td>MUS1056H</td>
<td>Approaches to Meaning in the Renaissance Motet</td>
</tr>
<tr>
<td>MUS1057H</td>
<td>Performing Politics: Individuality and the Collective in Music and Dance</td>
</tr>
<tr>
<td>MUS1058H</td>
<td>Music and Politics</td>
</tr>
<tr>
<td>MUS1059H</td>
<td>Ars Nova</td>
</tr>
<tr>
<td>MUS1061H</td>
<td>Performance Space in Seventeenth-Century Music</td>
</tr>
<tr>
<td>MUS1065H</td>
<td>Music History Pedagogy</td>
</tr>
<tr>
<td>MUS1066H</td>
<td>Music and the Racial and Ethnic Imaginations</td>
</tr>
<tr>
<td>MUS1069H</td>
<td>Remix Music, from Analogue to Digital</td>
</tr>
<tr>
<td>MUS1070H</td>
<td>Music, Genre, and Variation</td>
</tr>
<tr>
<td>MUS1131H</td>
<td>Popular Music and the Immaterial: From Spirituality to Virtuality</td>
</tr>
<tr>
<td>MUS1132H</td>
<td>Community-Engaged Music Archiving</td>
</tr>
<tr>
<td>MUS1134H</td>
<td>Music, Capital, Markets, and Industries</td>
</tr>
<tr>
<td>MUS1135H</td>
<td>Music, Sound, and the Environment</td>
</tr>
<tr>
<td>MUS1137H</td>
<td>Nationalism in Music and Dance</td>
</tr>
<tr>
<td>MUS1140H</td>
<td>Romantic Musings on the Middle Ages</td>
</tr>
<tr>
<td>MUS1141H</td>
<td>Ethnomusicology of Voice</td>
</tr>
<tr>
<td>MUS1144H</td>
<td>Music in the Films of Sir Alfred Hitchcock</td>
</tr>
<tr>
<td>MUS1145H</td>
<td>Sonic Innovations in Black Popular Musics</td>
</tr>
<tr>
<td>MUS1146H</td>
<td>Geographies of Opera: Wagner and Puccini</td>
</tr>
<tr>
<td>MUS1147H</td>
<td>Music After the DJ, from Soundsystems to Serato</td>
</tr>
<tr>
<td>MUS1149H</td>
<td>Jews’ Sonic Worlds from Early Modernity to the Present</td>
</tr>
<tr>
<td>MUS1150H</td>
<td>Music and Land: Sounds of Belonging and Exclusion</td>
</tr>
<tr>
<td>MUS1169H</td>
<td>Listening to Cities: Music, Sound, and Noise in Urban Environments</td>
</tr>
<tr>
<td>MUS1223H</td>
<td>Virtuosity in Baroque Music</td>
</tr>
<tr>
<td>MUS1234H</td>
<td>Health, Aging and Popular Music</td>
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<tr>
<td>MUS1235H</td>
<td>Topics in Music and the History of Medicine</td>
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<tr>
<td>MUS1236H</td>
<td>Haydn</td>
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<td>MUS1240H</td>
<td>Diegetic Music in Film</td>
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<tr>
<td>MUS1246H</td>
<td>Music and Colonialism</td>
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<tr>
<td>MUS1250H</td>
<td>PhD Seminar</td>
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<tr>
<td>MUS1254H</td>
<td>Critical Approaches to Popular Music</td>
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<tr>
<td>MUS1255H</td>
<td>Issues in Music and Philosophy</td>
</tr>
<tr>
<td>MUS1258H</td>
<td>Keywords in African Sound</td>
</tr>
<tr>
<td>MUS1260H</td>
<td>Music and the Enlightenment</td>
</tr>
<tr>
<td>MUS1267H</td>
<td>Popular Music and Identity</td>
</tr>
<tr>
<td>MUS1270H</td>
<td>Music and East Asian Modernity</td>
</tr>
<tr>
<td>MUS1271H</td>
<td>Music and Circulation</td>
</tr>
<tr>
<td>MUS1272H</td>
<td>19th Century Music and Discourses of Nature</td>
</tr>
<tr>
<td>MUS1275H</td>
<td>Sound and Music in the Middle East</td>
</tr>
<tr>
<td>MUS1276H</td>
<td>Music and Material Culture</td>
</tr>
<tr>
<td>MUS1277H</td>
<td>Ethnomusicology and Cultural Geography</td>
</tr>
<tr>
<td>MUS1278H</td>
<td>Music and Cultures of Listening in Late Modernity</td>
</tr>
<tr>
<td>MUS1279H</td>
<td>Ethnomusicology without Music</td>
</tr>
<tr>
<td>MUS1280H</td>
<td>Analysis and its Futures in Ethnomusicology</td>
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<tr>
<td>MUS1281H</td>
<td>Ethnomusicology Dissertation Writing Seminar</td>
</tr>
<tr>
<td>MUS1317H</td>
<td>Music in Canada</td>
</tr>
<tr>
<td>MUS1990H</td>
<td>MA Major Paper or Project</td>
</tr>
<tr>
<td>MUS1997H</td>
<td>Research in Ethnomusicology</td>
</tr>
<tr>
<td>MUS1998H</td>
<td>Individual Reading and Research</td>
</tr>
<tr>
<td>MUS1999H</td>
<td>Research in Musicology</td>
</tr>
</tbody>
</table>

Course that may continue over a program. The course is graded when completed.
### Music: Music MA, PhD; Field: Music and Health Sciences Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUS7110H</td>
<td>Neurosciences of Music: Scientific Foundations, Clinical Translations</td>
</tr>
<tr>
<td>MUS7199H</td>
<td>Special Research Topic in Music and Health</td>
</tr>
<tr>
<td>MUS7400H</td>
<td>Introduction to Music and Health Care</td>
</tr>
<tr>
<td>MUS7405H</td>
<td>Health in Music Performance</td>
</tr>
<tr>
<td>MUS7406H</td>
<td>Music Psychology</td>
</tr>
<tr>
<td>MUS7407H</td>
<td>Clinical Research Practicum</td>
</tr>
<tr>
<td>MUS7412H</td>
<td>Elementary Improvisation Methods</td>
</tr>
<tr>
<td>MUS7415H</td>
<td>Topics in Music and Health</td>
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<tr>
<td>MUS7416H</td>
<td>Topics in Music and Health II</td>
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<tr>
<td>MUS7995Y</td>
<td>Music and Health Doctoral Research Project</td>
</tr>
<tr>
<td>MUS7998Y</td>
<td>Readings in Advanced Topics in Music and Health</td>
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</table>

*Course that may continue over a program. The course is graded when completed.*

### Music: Music MA, PhD; Field: Music Education Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUS2001H</td>
<td>Music in Cultural Perspective</td>
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<tr>
<td>MUS2004H</td>
<td>Music in Childhood</td>
</tr>
<tr>
<td>MUS2010H</td>
<td>Music and Social Movements</td>
</tr>
<tr>
<td>MUS2111H</td>
<td>Introduction to Research in Music Education</td>
</tr>
<tr>
<td>MUS2112H</td>
<td>Advanced Topics in Research in Music Education (prerequisite: MUS2111H)</td>
</tr>
<tr>
<td>MUS2113H</td>
<td>Musically Queer</td>
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<tr>
<td>MUS2115H</td>
<td>Truth and Reconciliation</td>
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<tr>
<td>MUS2116H</td>
<td>Moral Economy of Death in Music, Education, and Pedagogy</td>
</tr>
<tr>
<td>MUS2117H</td>
<td>Sound Studies and Music Education</td>
</tr>
<tr>
<td>MUS2132H</td>
<td>Jazz Education</td>
</tr>
<tr>
<td>MUS2151H</td>
<td>Philosophy and Music Education</td>
</tr>
<tr>
<td>MUS2160H</td>
<td>Contemporary Perspectives in Music Education</td>
</tr>
<tr>
<td>MUS2167H</td>
<td>Curriculum Inquiry</td>
</tr>
<tr>
<td>MUS2175H</td>
<td>Teacher Perspectives in Music Education</td>
</tr>
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</table>

### Music: Music MA, PhD; Field: Music Theory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MUS1250H</td>
<td>PhD Seminar</td>
</tr>
<tr>
<td>MUS1990H</td>
<td>MA Major Paper</td>
</tr>
<tr>
<td>MUS1998H</td>
<td>Individual Reading and Research</td>
</tr>
<tr>
<td>MUS3101H</td>
<td>Seminar in Schenkerian Analysis I</td>
</tr>
<tr>
<td>MUS3113H</td>
<td>Symphonic Modernisms, 1900–1925</td>
</tr>
<tr>
<td>MUS3232H</td>
<td>Romantic Form</td>
</tr>
<tr>
<td>MUS3243H</td>
<td>The Music of Elliott Carter</td>
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<tr>
<td>MUS3245H</td>
<td>Music of Ligeti and Lutoslawski</td>
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<tr>
<td>MUS3248H</td>
<td>Current Compositional Practices</td>
</tr>
<tr>
<td>MUS3251H</td>
<td>Late Schubert</td>
</tr>
<tr>
<td>MUS3261H</td>
<td>Theory and Analysis of Popular Music</td>
</tr>
<tr>
<td>MUS3306H</td>
<td>Pedagogy of Music Theory</td>
</tr>
<tr>
<td>MUS3309H</td>
<td>Brahms: Symphonies and Chamber Music</td>
</tr>
<tr>
<td>MUS3316H</td>
<td>Cognitive Perspectives in Music Theory</td>
</tr>
<tr>
<td>MUS3403H</td>
<td>Theory and Analysis of Atonal Music</td>
</tr>
<tr>
<td>MUS3404H</td>
<td>Extended Tonal Techniques in Twentieth-Century Music</td>
</tr>
</tbody>
</table>
Music: Music Performance MMus; Field: Collaborative Piano

Master of Music (Field: Collaborative Piano)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program (Bachelor of Music or Bachelor of Arts in Music) and standing from another recognized university.
- Selected applicants must pass an audition.

Program Requirements

- **Coursework.** Students must complete 7.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1
  - 1.0 FCE: MUS4444Y0 Applied Music I
  - 1.0 FCE: MUS4445Y0 Applied Music II
  - 0.5 FCE selected from
    - MUS4600H Performance Practices Before 1800
    - MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
    - MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 0.5 FCE: MUS4210H Introduction to Music Analysis
  - 0.5 FCE: MUS4213H Advanced Repertoire for Singers and Pianists I
  - 0.5 FCE: MUS4214H Advanced Repertoire for Singers and Pianists II
  - 0.5 FCE: MUS4502H Collaborative Piano Techniques I
  - 0.5 FCE: MUS4506H Sonata Coaching I
  - 0.5 FCE: MUS4508H Collaborative Piano Techniques II Vocal or MUS4509H Collaborative Piano Techniques II Vocal
  - 0.5 FCE: elective.
- Based on the outcome of preliminary consultations with the department, students may be required to take:
  - 0.5 FCE: MUS4520H Advanced Diction Studies I or
  - 0.5 FCE: MUS4521H Advanced Diction Studies II or
  - 0.5 FCE: MUS4522H Advanced Diction Studies III.
  
  (Credit/No Credit) (end of Year 1).
  - MUS4166Y Performance Project (Credit/No Credit) (end of Year 1).
  - MUS4188Y Public Capstone Presentation (Credit/No Credit) (end of Year 2).

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

0 Course that may continue over a program. The course is graded when completed.
• Two recitals, one in each year:
  - 1.0 FCE: MUS6666Y0 Recital I
  - 1.0 FCE: MUS8888Y0 Recital II.

Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years full-time

Music: Music Performance MMus; Field: Composition

Master of Music (Field: Composition)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.

• Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.

• Selected applicants must pass an audition.

Program Requirements

• Coursework. Students must complete 7.0 full-course equivalents (FCEs) including:
  - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1.
  - 0.5 FCE selected from:
    • MUS4600H Performance Practices Before 1800 or MUS4606H Special Topics in Performance Practice
    • MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
    • MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 0.5 FCE: MUS4210H Introduction to Music Analysis
  - 1.0 FCE: MUS4444Y0 Applied Music I
  - 1.0 FCE: MUS4445Y0 Applied Music II
  - Students in orchestral conducting must also complete 3.0 FCEs as follows:
    • 0.5 FCE: MUS4220H Orchestral Conducting I
    • 0.5 FCE: MUS4221H Orchestral Conducting II
    • 1.0 FCE: MUS4222Y Advanced Orchestral Conducting
    • 0.5 FCE: MUS4223H Choral Conducting I
    • 0.5 FCE: elective
  - Students in wind ensemble conducting must also complete 3.0 FCEs as follows:
    • 0.5 FCE: MUS4220H Wind Ensemble Conducting I
    • 0.5 FCE: MUS4227H Wind Ensemble Conducting II
    • 0.5 FCE: MUS4228H Advanced Wind Conducting I
    • 0.5 FCE: MUS4229H Advanced Wind Conducting II
    • 0.5 FCE: elective
  - Students in choral conducting must also complete 3.0 FCEs as follows:
    • 0.5 FCE: MUS4220H Orchestral Conducting I
    • 0.5 FCE: MUS4223H Choral Conducting I

Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)
Music: Music Performance MMus; Field: Historical Performance

Master of Music (Field: Historical Performance)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
- Selected applicants must pass an audition.

Program Requirements

- **Coursework.** Students must complete 7.0 full-course equivalents (FCEs) as follows:
  - 5.0 FCEs must include:
    - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1
    - 2.0 FCEs: MUS4444Y0 Applied Music I and MUS4445Y0 Applied Music II
    - 0.5 FCE selected from:
      - MUS4600H Performance Practices Before 1800
      - MUS4606H Special Topics in Performance Practice
      - MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
      - MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 0.5 FCE: MUS4210H Introduction to Music Analysis
  - 1.0 FCE in large ensembles:

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

0 Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Instrumental

Master of Music (Field: Instrumental)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
- Selected applicants must pass an audition.

Program Requirements

- **Coursework.** Students must complete 7.0 full-course equivalents (FCEs), of which 5.0 FCEs must include:
  - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1
  - 1.0 FCE: MUS4444Y0 Applied Music I and MUS4445Y0 Applied Music II
  - 0.5 FCE selected from:
    - MUS4600H Performance Practices Before 1800 or MUS4606H Special Topics in Performance Practice
    - MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
    - MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 1.0 FCE in large ensembles:

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

0 Course that may continue over a program. The course is graded when completed.

Two recitals, one in each year:
- 1.0 FCE: MUS6666Y0 Recital I
- 1.0 FCE: MUS8888Y0 Recital II.
Students in piano solo performance must complete MUS5700H *Piano Master Class I* (0.5 FCE) and MUS5701H *Piano Master Class II* (0.5 FCE).

- In place of the ensemble performance, accordion, guitar, harp, harpsichord, organ, and piano students will select 1.0 FCE in elective courses from a specified list approved by the department.

- **Two recitals**, one in each year. Recitals may include a chamber music component with the approval of the department:
  - 1.0 FCE: MUS6666Y0 *Recital I*
  - 1.0 FCE: MUS8888Y0 *Recital II*.

### Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

### Time Limit

3 years full-time

*Course that may continue over a program. The course is graded when completed.*

---

**Music: Music Performance MMus; Field: Jazz**

### Master of Music (Field: Jazz)

### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
- Selected applicants must pass an audition.

### Program Requirements

- **Coursework.** Students must complete **7.0 full-course equivalents (FCEs)** including:
  - 1.0 FCE: MUS4300Y, normally taken in Year 1
  - 1.0 FCE: MUS4444Y0 *Applied Music I*
  - 1.0 FCE: MUS4445Y0 *Applied Music II*
  - 1.0 FCE: MUS4606H *Special Topics in Performance Practice and MUS4615H Analysis and Performance Practices of Twentieth-Century Music*
  - 1.0 FCE: either
    - MUS4310Y *Advanced Jazz Composition and Arranging I* or
    - MUS4311Y *Advanced Jazz Composition and Arranging II*
  - 1.0 FCE chosen from a specified list approved by the department.
- Students must also include in their programs 1.0 FCE selected from one or more of the following areas:
  - **Small Group Jazz Ensemble Performance**
    - MUS4740H *Small Group Jazz Performance I*
    - MUS4741H *Small Group Jazz Performance II*
    - MUS4742H *Small Group Jazz Performance III*
  - **Jazz Orchestra**
    - MUS4750H *Jazz Orchestra I*
    - MUS4751H *Jazz Orchestra II*
    - MUS4752H *Jazz Orchestra III*
    - MUS4753H *Jazz Orchestra IV*
  - **Vocal Jazz Ensemble**
    - MUS4760H *Vocal Jazz Ensemble I*
    - MUS4761H *Vocal Jazz Ensemble II*
    - MUS4762H *Vocal Jazz Ensemble III*
    - MUS4763H *Vocal Jazz Ensemble IV.*

- **Two recitals**, one in each year. However, students may elect to replace one recital with a significant recording project.
  - 1.0 FCE: MUS6666Y0 *Recital I*
  - 1.0 FCE: MUS8888Y0 *Recital II.*

### Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

### Time Limit

3 years full-time

*Course that may continue over a program. The course is graded when completed.*

---

**Music: Music Performance MMus; Field: Music Technology and Digital Media**

### Master of Music (Field: Music Technology and Digital Media)

### Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
- Applicants must submit a portfolio (e.g., scores, recordings, multimedia creations) that demonstrates at least two of the following:
  - knowledge of computer applications in music;
  - competency in music performance or composition (acoustic or digital);
• Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
• Selected applicants must pass an audition.

Program Requirements

• Coursework. Students must complete 7.0 full-course equivalents (FCEs) as follows:
  
  o Year 1 (3.5 FCEs)
    • 0.5 FCE: MUS3610H Music Entrepreneurship: Music and Cities
    • 0.5 FCE: MUS3611H Creative Applications of Technology I
    • 0.5 FCE: MUS3612H Creative Applications of Technology II
    • 0.5 FCE: MUS3614H Sound Recording I
    • 0.5 FCE: MUS3615H Sound Recording II
    • 1.0 elective FCE:
      ▶ 0.5 FCE selected from Music Technology and Digital Media and
      ▶ 0.5 FCE selected from any of the Faculty of Music graduate courses.
  
  o Year 2 (3.5 FCEs)
    • 0.5 FCE: JDM3619H Digital Media Distribution (Credit/No Credit)
    • 2.0 FCEs: electives selected from an approved department list, or from another graduate unit, with permission.
    • 1.0 FCE: MUS3666Y0 Music Technology and Digital Media Major Project (Credit/No Credit), completed in Year 2, consisting of a new musical composition or version recorded, mixed, produced, and mastered, integrating at least two media such as electronic and acoustic, music for picture, or live performance with multimedia.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

0 Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Piano Pedagogy

Master of Music (Field: Piano Pedagogy)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
• Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
• Selected applicants must pass an audition.

Program Requirements

• Coursework. Students must complete 7.0 full-course equivalents (FCEs) as follows:
  
  o 1.0 FCE: MUS4200Y Critical Approaches to Music History, taken in Year 1
  
  o 0.5 FCE: MUS4210H Introduction to Music Analysis
  
  o 1.0 FCE: MUS4444Y0 Applied Music I
  
  o 1.0 FCE: MUS4445Y0 Applied Music II
  
  o 1.0 FCE: MUS4513Y Operatic Repertory, taken in Year 2
  
  o 2.0 FCEs: MUS4900Y Operatic Studies I and MUS4901Y Operatic Studies II
  
  o 0.5 FCE: elective chosen from a specified list approved by the department.

• Performance in operatic productions will be evaluated by a committee and assigned grades under MUS4966Y0 Operatic Roles I (1.0 FCE) and MUS4988Y0 Operatic Roles II (1.0 FCE).
Program Requirements

- **Coursework.** Students must complete 7.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1.
  - 0.5 FCE: MUS4210H Introduction to Music Analysis
  - 1.0 FCE: MUS4444Y0 Applied Music I.
  - 1.0 FCE: MUS4445Y0 Applied Music II.
  - 0.5 FCE: MUS4270H Piano Pedagogy: Beginning and Intermediate Levels
  - 0.5 FCE: MUS4271H Practicum: Beginning and Intermediate Levels
  - 0.5 FCE: MUS4272H Piano Pedagogy: Advanced and University Levels
  - 0.5 FCE: MUS4273H Practicum: Advanced and University Levels
  - 0.5 FCE selected from:
    - MUS4600H Performance Practices Before 1800
    - MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
    - MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 1.0 FCE: electives.

- **Two recitals.** With approval, one recital may be replaced by a pedagogy project and presentation.
  - 1.0 FCE: MUS6666Y0 Recital I
  - 1.0 FCE: MUS8888Y0 Recital II.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

° Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Vocal Pedagogy

Master of Music (Field: Vocal Pedagogy)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music's additional admission requirements stated below.
- Applicants to the MMus program must hold a Bachelor of Music degree in the area of specialization from the University of Toronto with an average standing of mid-B or better over the final two years or an equivalent program and standing from another recognized university.
- Selected applicants must pass an audition.
Program Requirements

- **Coursework.** Students must complete 8.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE: MUS4200Y Critical Approaches to Music History, normally taken in Year 1
  - 0.5 FCE: MUS4210H Introduction to Music Analysis
  - 0.5 FCE selected from:
    - MUS4213H Advanced Repertoire for Singers and Pianists I
    - MUS4214H Advanced Vocal Repertoire Study I
  - 1.0 FCE: MUS4240Y Introduction to Voice Pedagogy and Vociology
  - 0.5 FCE: MUS4248H Optimizing the Singing Mind
  - 1.0 FCE: MUS4240Y Introduction to Voice Pedagogy and Vociology
  - 0.5 FCE: MUS4248H Optimizing the Singing Mind
  - 1.0 FCE: MUS4245Y0 Applied Music I
  - 0.5 FCE: MUS4248H Optimizing the Singing Mind
  - 1.0 FCE: MUS4245Y0 Applied Music II
  - 0.5 FCE: MUS4600H Performance Practices Before 1800
  - MUS4610H Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
  - MUS4615H Analysis and Performance Practices of Twentieth-Century Music
  - 0.5 FCE: MUS7406H Music Psychology
  - 0.5 FCE: elective chosen from a list of courses approved by the department.

- **Two recitals:**
  - 1.0 FCE: MUS6666Y0 Recital I
  - 1.0 FCE: MUS8888Y0 Recital II.

**Program Requirements**

- **Coursework.** Students must complete a minimum of 5.0 full-course equivalents (FCEs), including:
  - 1.0 FCE: MUS3300Y DMA Advanced Composition I
  - 1.0 FCE: MUS3305Y DMA Advanced Composition II
  - 1.0 FCE: MUS3999Y Research in Composition, selected in consultation with the advisory committee
  - Students entering from outside the University of Toronto will be given diagnostic tests in musical analysis, counterpoint, and harmony, the result of which may be additional course requirements beyond the 5.0 FCEs.

- Upon completion of coursework, students are required to present a **recital of original works** (MUS3888Y0 DMA Recital of Works: 1.0 FCE) to the satisfaction of the department. In some cases, professional-quality tapes of performances totalling the equivalent of a full recital may be substituted.

- The **thesis** for the DMA shall be an extended composition approved by the department, prepared under the supervision of an advisory committee and defended at the **Doctoral Final Oral Examination.**

- The **residency** requirement for all students is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

**Program Length**

6 sessions full-time (typical registration sequence: F/N/S/F/W/S)

**Time Limit**

3 years full-time

_0 Course that may continue over a program. The course is graded when completed._

Music: Music Performance DMA; Field: Composition

Doctor of Musical Arts (Field: Composition)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.
- Applicants for the DMA in the Composition field must hold a Master of Music Performance degree specializing in Composition from the University of Toronto, or its equivalent from another recognized university, with an average standing of B+ or better.

Music: Music Performance DMA; Field: Performance

Doctor of Musical Arts (Field: Performance)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Music’s additional admission requirements stated below.
• Applicants for the DMA in the Performance field must hold a Master of Music degree specializing in Performance from the University of Toronto, or its equivalent from another university, with an average standing of B+ or better.

• Applicants are required to pass an audition.

• An essay of approximately 3,000 words which demonstrates the student's ability to handle a research problem.

• Applicants, whether from the University of Toronto or elsewhere, may be interviewed by the department.

Program Requirements

• **Coursework.** Students must complete a minimum of 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: MUS4800H DMA Seminar, taken in the first session.
  - 0.5 FCE: MUS4899H Research in Performance, begun in the second session.
  - 1.0 FCE: MUS4844Y0 Advanced Applied Music I.
  - 1.0 FCE: MUS4845Y0 Advanced Applied Music II.
  - The remaining 2.0 FCEs must be graduate seminar courses.
  - Coursework should be completed by the end of Year 2 with an average grade of at least A−. Exceptions to the time of completion are:
    - MUS4899Y Research in Performance, to be taken in the Winter session of Year 1 and the Fall of Year 2, which lays the groundwork for the dissertation research and leads to a field examination at the end of Year 2; and
    - MUS4845Y0 Advanced Applied Music II. Students may be required to take additional courses or acquire other skills to meet the needs of their proposed areas of study.
  - Students are permitted two attempts to complete the field examination. If students are unsuccessful in their second attempt at the field examination, the department will make a recommendation for program termination.

• **Three DMA recitals.**
  - 1.0 FCE: MUS4866Y0 DMA Recital I
  - 1.0 FCE: MUS4877Y0 DMA Recital II
  - 1.0 FCE: MUS4888Y0 DMA Recital III.
  - The format of these recitals will be determined in consultation with the supervisor and the supervisory committee.

• Reading knowledge of **one language** other than English is required. The required language will be determined by the department. The department may require competence in additional languages. All remaining course and language requirements, including the field exam, must be completed successfully by the end of Year 2.

• The **residence** requirement is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years full-time

Time Limit

6 years full-time

**Music: Music Performance MMus; Field: Applied Music and Health Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUS4112Y</td>
<td>Clinical Performance Practicum</td>
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<tr>
<td>MUS4115Y</td>
<td>Principles of Clinical Performance Pedagogy</td>
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<tr>
<td>MUS4165Y0</td>
<td>Applied Music for Clinical Practice</td>
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<tr>
<td>MUS4166Y</td>
<td>Performance Project (Credit/No Credit)</td>
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<tr>
<td>MUS4188Y</td>
<td>Public Capstone Presentation</td>
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<tr>
<td>MUS7110H</td>
<td>Neurosciences of Music: Scientific Foundations, Clinical Translations</td>
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<tr>
<td>MUS7400H</td>
<td>Introduction to Music and Health Care</td>
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<tr>
<td>MUS7407H0</td>
<td>Clinical Research Practicum</td>
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<tr>
<td>MUS7412H</td>
<td>Elementary Improvisation Methods</td>
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<tr>
<td>MUS7415H</td>
<td>Topics in Music and Health Care I</td>
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<tr>
<td>MUS7416H</td>
<td>Topics in Music and Health Care II</td>
</tr>
</tbody>
</table>

• **Course that may continue over a program. The course is graded when completed.**

**Music: Music Performance MMus, DMA; Field: Composition Courses**

Final course offerings may vary. Students should consult the departmental handbook.

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>MUS3101H</td>
<td>Seminar in Schenkerian Analysis I</td>
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<td>MUS3105Y</td>
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<td>MUS3114H</td>
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<td>MUS3116H</td>
<td>Learning from the Visual Arts for Composers</td>
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<td>MUS3203H</td>
<td>Score Analysis for Composers and Conductors</td>
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<td>MUS3204H</td>
<td>Advanced Orchestration</td>
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<tr>
<td>MUS3212H</td>
<td>Music and Popular Entertainments</td>
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<tr>
<td>MUS3213H</td>
<td>Composing for Chamber Ensemble</td>
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<td>MUS3222H</td>
<td>Composing for Film</td>
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<tr>
<td>MUS3223H</td>
<td>Berg</td>
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<td>MUS3224H</td>
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<td>MUS3225H</td>
<td>Music of Gubaidulina, Coulthard, and Chen</td>
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<td>MUS3229H</td>
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<td>MUS3231H</td>
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<td>MUS3232H</td>
<td>Romantic Form: The Orchestral Music of Berlioz, Mendelssohn, Schumann, and Wagner</td>
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<td>MUS3233H</td>
<td>Compositional Identity and Practice in the 21st Century</td>
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<td>MUS3244H</td>
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<td>MUS3245H</td>
<td>The Music of Ligeti and Lutoslawski</td>
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<tr>
<td>MUS3258H</td>
<td>Songwriting (prerequisite: MIDI Orchestration and Improvisation)</td>
</tr>
<tr>
<td>MUS3260H</td>
<td>The New Polish School of Composition</td>
</tr>
<tr>
<td>MUS3300Y</td>
<td>DMA Advanced Composition I</td>
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<td>MUS3305Y</td>
<td>DMA Advanced Composition II</td>
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<tr>
<td>MUS3306H</td>
<td>Pedagogy of Music Theory</td>
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<td>MUS3309H</td>
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<td>MUS3403H</td>
<td>Theory and Analysis of Atonal Music</td>
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<td>MUS3404H</td>
<td>Extended Tonal Techniques in the Twentieth Century</td>
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<td>MUS3409H</td>
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<td>MUS3800H</td>
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<td>MUS3990Y</td>
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<td>MUS3998H</td>
<td>Reading and Research in Composition</td>
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<tr>
<td>MUS3999Y</td>
<td>Research in Composition</td>
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<tr>
<td>MUS4615H</td>
<td>Analysis and Performance Practices of Twentieth-Century Music</td>
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</tbody>
</table>

^ Course that may continue over a program. The course is graded when completed.

### Music: Music Performance MMus, DMA; Field: Performance Courses

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<th>Course Code</th>
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<td>MUS4200Y</td>
<td>Critical Approaches to Music History</td>
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<tr>
<td>MUS4210H</td>
<td>Introduction to Music Analysis</td>
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<tr>
<td>MUS4213H</td>
<td>Advanced Repertoire for Singers and Pianists I</td>
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<tr>
<td>MUS4214H</td>
<td>Advanced Repertoire for Singers and Pianists II</td>
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<tr>
<td>MUS4219H</td>
<td>Perspectives on the Business of Music Performance</td>
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<td>MUS4220H</td>
<td>Orchestral Conducting I</td>
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<td>MUS4221H</td>
<td>Orchestral Conducting II</td>
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<td>MUS4223H</td>
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<tr>
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<tr>
<td>MUS4228H</td>
<td>Advanced Wind Conducting I</td>
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<tr>
<td>MUS4229H</td>
<td>Advanced Wind Conducting II (prerequisite: MUS4228H)</td>
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<tr>
<td>MUS4230Y</td>
<td>Vocal-Choral Pedagogy for Conductors (prerequisite: graduate standing in the choral conducting, voice performance, or music education program, and permission of instructors)</td>
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<td>MUS4231H</td>
<td>Advanced Vocal Repertoire Study I</td>
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<td>MUS4234H</td>
<td>Explorations in Performance</td>
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<td>Introduction to Voice Pedagogy and Vocology</td>
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<tr>
<td>MUS4241H</td>
<td>Advanced Vocal Pedagogy and Vocology</td>
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<td>Advanced Concepts in Singing and Vocology</td>
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<td>MUS4270H</td>
<td>Piano Pedagogy: Beginning and Intermediate Levels</td>
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<tr>
<td>MUS4271H</td>
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⁰ Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Music Technology and Digital Media Courses

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<td>Production for Multi-Channel Immersive Audio (prerequisites: MUS3612H and MUS3616H)</td>
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<td>Computer-Assisted Sound Design and Composition (prerequisites: MUS3611H, MUS3612H, or equivalent)</td>
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Music: Courses Recognized for MMus in Music Performance and MA Graduate Credit

Available to MA students only with the permission of the department.

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Near and Middle Eastern Civilizations

NMC: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Near and Middle Eastern Civilizations

MA and PhD

• Fields:
  o Ancient and Near Eastern Studies;
  o Middle Eastern and Islamic Studies

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Diaspora and Transnational Studies
  o Near and Middle Eastern Civilizations, MA, PhD
• Jewish Studies
  o Near and Middle Eastern Civilizations, MA, PhD
• Mediterranean Archaeology
  o Near and Middle Eastern Civilizations, PhD
• Sexual Diversity Studies
  o Near and Middle Eastern Civilizations, MA, PhD
• Women and Gender Studies
  o Near and Middle Eastern Civilizations, MA, PhD

Overview

In the Department of Near and Middle Eastern Civilizations, faculty conduct research in the following areas: Egyptology, including archaeology, language, history, and religion; Mesopotamia and the Near East, including archaeology and Assyriology; Syro-Palestinian archaeology; Hebrew and Judaic studies, including Biblical and Rabbinic Hebrew, law, history, religion, and modern Hebrew literature; Aramaic (Ancient, Biblical, Targumic, and Talmudic Aramaic) and Syriac studies, including language, history, religion; Arabic studies; Islamic studies; history of the Islamic world and the modern Middle East; Islamic art; Persian studies; and Turkish studies, including Ottoman language and history.

Contact and Address

Web: nmc.utoronto.ca
Telephone: (416) 978-3181
Fax: (416) 978-3305

Department of Near and Middle Eastern Civilizations
University of Toronto
2nd Floor, 4 Bancroft Avenue
Toronto, Ontario M5S 1C1
Canada

Near and Middle Eastern Civilizations: Graduate Faculty

Full Members

Aksan, Virginia - BA, MA, MLS, PhD
Bahoura, Haytham - BA, MA, PhD
Beaulieu, Paul-Alain - LLB, BA, MA, PhD
Daviau, Michele - MTh, PhD
Fox, Harry - BSc, BA, MS, MA, PhD
Goeb, Katja - MA, DPhil
Grzymski, Krzysztof - MA, PhD
Hansson, Jens - BPhil, DPhil
Harrak, Amir - MA, LTh, PhD
Harrison, Timothy - BA, MA, PhD (Chair and Graduate Chair)
Holmstedt, Robert - BA, MA, PhD
Kingston, Paul - BA, MA, MPH, DPhil
Leprohon, Ronald - BA, PhD
Meacham, Tirzah - BA, MA, PhD
Miro, Sarianna - MA, PhD
Miller, Jeanne - BA, MA, PhD (Associate Chair, Graduate)
Mittermaier, Amira - MA, PhD
Mountz, Nada - PhD
Newman, Judith - PhD
Ostapchuk, Victor - BA, PhD
Pouls Wegner, Mary-Anne - BA, PhD
Raffaeli, Enrico - PhD
Reichel, Clemens - MA, PhD
Reilly, James - BA, MA, PhD
Saleh, Walid - BA, MA, PhD
Subtelny, Maria - BA, PhD
Tavakoli-Targhi, Mohamad - BA, MA, PhD
Taylor, Glen - BA, MPH, MTh, PhD
Virani, Shafique - PhD

Members Emeriti

Garshowitz, Libby - BA, MA, PhD
Golombek, Lisa - BA, MA, PhD
Keall, Edward - BA, PhD
Lutz, R. Theodore - MA
Northrup, Linda - BA, MA, PhD
Pietersma, Albert - BA, BD, PhD
Sandler, Rivane - BA, MA, PhD
Associate Members

Abdullah, Thabit - BA, MA, PhD
Ali, Abdel-Khalig - BA, MA, PhD
Andres Toledo, Miguel Angel - MA, PhD
Baker, Heather D. - DPhil
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Fadel, Mohammad - BA, JD, PhD
Hempel, Charlotte - BA, PhD
Hojatollah Taleghani, Azita - BA, MA, MA, PhD
Kana'an, Ruba - MPH, MPH, DPhil
McLaughlin, John - BA, MA, MDiv, PhD
Mercan, Gozde - BA, MA, PhD
Methodieva, Milena - PhD
Sheibani, Mariam - BA, MA, PhD

NMC: Near and Middle Eastern Civilizations
MA

Master of Arts

Program Description

Depending on the amount of undergraduate preparation, students may enrol in either a two-year MA program or a one-year MA program option. Students can also complete the MA through a coursework option or a thesis option. The MA program may be taken on a part-time basis.

MA Program (One-Year Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Near and Middle Eastern Civilizations' additional admission requirements stated below.
- An appropriate bachelor's degree in a relevant program from a recognized university with an average of at least B+, or equivalent, in the final year.
- Two letters of reference.
- Statement of academic intent.
- Some programs may require appropriate knowledge of a primary source language, or one or more European languages.
- Students choosing to focus on Islamic Art and Material Culture must have a reading knowledge of French or German at the time of admission.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

Coursework Option

- Students must complete 3.0 full-course equivalents (FCEs).

Thesis Option

- Students must complete a thesis (1.0 FCE) under the guidance of a supervisor on a topic approved by the supervisor.
- 2.0 FCEs in coursework.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
9 sessions part-time

Time Limit

3 years full-time;
6 years part-time

MA Program (Two-Year Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Near and Middle Eastern Civilizations' additional admission requirements stated below.
- An appropriate bachelor's degree in a relevant program from a recognized university with an average of at least B+, or equivalent, in the final year.
- Two letters of reference.
- Statement of academic intent.
- Some programs may require appropriate knowledge of a primary source language, or one or more European languages.
- Students choosing to focus on Islamic Art and Material Culture must have a reading knowledge of French or German at the time of admission.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

All students must complete 6.0 full-course equivalents (FCEs). Students who choose to focus on Islamic art and material culture must successfully complete at least 2.0 FCEs each in art and in Near and Middle Eastern Civilizations.
Coursework Option

- Students must complete 6.0 FCEs.

Thesis Option

- Students must complete a thesis (1.0 FCE) under the guidance of a supervisor on a topic approved by the supervisor.
- 5.0 FCEs in coursework.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
18 sessions part-time

Time Limit

3 years full-time;
6 years part-time

NMC: Near and Middle Eastern Civilizations
PhD

Doctor of Philosophy

Program Description

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate MA or 2) direct entry following completion of a bachelor's degree.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Near and Middle Eastern Civilizations' additional admission requirements stated below.
- Admission via one of two routes:
  - MA degree in a relevant program from a recognized university with at least an A– average or equivalent in courses taken for the MA program.
  - Direct entry from a bachelor's degree for exceptionally qualified applicants, at the discretion of the department.
- Ability to conduct independent research.
- Competence in primary source language(s) relevant to the applicant's research.
- Two letters of reference.
- Statement of academic intent.
- Writing sample of no more than 12 double-spaced pages including footnotes.
- Curriculum vitae (CV)/resumé up to three pages in length.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- The program of study is determined in consultation with the department and includes written and oral general examinations.
- Each year of the PhD program, students are obligated to consult with their advisor and Graduate Coordinator to see that appropriate coursework is done and that the language requirements are completed on schedule.
- The minimum course requirement will normally be 6.0 full-course equivalents (FCEs) as follows:
  - Year 1: 3.0 FCEs.
  - Year 2: 3.0 FCEs.
- Students who have completed a two-year MA in the department may apply for a course reduction that will be granted at the discretion of the department. The reduction should normally be 1.0 FCE, but may be up to 3.0 FCEs in cases of students who also have an exceptional preparation in their area of study at the BA level. Coursework and all language requirements are to be completed by the end of Year 2.
- In consultation with the supervisor, examining committee, and supervisory committee (if it has already been established), students will prepare a short draft proposal of two to four pages with bibliography by May of Year 2. The short draft proposal will direct some of the preparation for the comprehensive examinations which will take place by the end of the first session of Year 3. A final proposal of at least 10 pages plus bibliography is to be approved by the supervisory committee within one to two months of the completion of the comprehensive exams.
- Students are required to demonstrate reading comprehension in two languages of modern scholarship (typically French and German), the first by the end of Year 1 in residence, and the second by the end of Year 2 of residence. A language other than French or German may be substituted with approval of the Academic Advisor and the Graduate Coordinator. In some cases, the department may require competence in another language relevant to the student's program. The choice of language(s) must be approved by the department.
- Residence. Students are required to be registered on campus for the period during which coursework requirements are being fulfilled, and in no case for less than two academic years.
- Thesis. The thesis must embody the results of original investigation and constitute a significant contribution to knowledge in the field. It must be based on research conducted while registered in the PhD program. The thesis must be successfully defended at a Final Oral Examination.

Program Length

4 years full-time; 5 years direct-entry

Time Limit

6 years full-time; 7 years direct-entry
## NMC: Near and Middle Eastern Civilizations
### MA, PhD Courses

#### Akkadian and Sumerian Languages and Literatures

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1001Y</td>
<td>Introduction to Old Babylonian</td>
</tr>
<tr>
<td>NMC1002Y</td>
<td>Selected Standard Babylonian Texts</td>
</tr>
<tr>
<td>NMC1003Y</td>
<td>Akkadian Historical Texts</td>
</tr>
<tr>
<td>NMC1004Y</td>
<td>Intermediate Sumerian</td>
</tr>
<tr>
<td>NMC1005Y</td>
<td>The Assyrian Language</td>
</tr>
<tr>
<td>NMC1008Y</td>
<td>Babylonian Archival Texts (Late Periods)</td>
</tr>
<tr>
<td></td>
<td>(prerequisite: NMC1001Y)</td>
</tr>
<tr>
<td>NMC1009Y</td>
<td>Introduction to Sumerian</td>
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#### Ancient Egyptian Language and Literature

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1201Y</td>
<td>Introduction to Middle Egyptian</td>
</tr>
<tr>
<td>NMC1202Y</td>
<td>Middle Egyptian Texts</td>
</tr>
<tr>
<td>NMC1203Y</td>
<td>Late Egyptian Texts</td>
</tr>
<tr>
<td>NMC1204Y</td>
<td>Cursive Script</td>
</tr>
<tr>
<td>NMC1209H</td>
<td>Old Egyptian Texts</td>
</tr>
<tr>
<td>NMC1210H</td>
<td>Ancient Egyptian Historical Texts</td>
</tr>
<tr>
<td>NMC1213H</td>
<td>Ancient Egyptian Religious and Funerary Literature</td>
</tr>
<tr>
<td>NMC1215H</td>
<td>Ancient Egyptian Instructional Texts (prerequisites: NMC1201Y, NMC1202Y)</td>
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#### Arabic Studies

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>NMC2100Y</td>
<td>Elementary Modern Standard Arabic</td>
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<tr>
<td>NMC2101Y</td>
<td>Intermediate Standard Arabic I</td>
</tr>
<tr>
<td>NMC2102Y</td>
<td>Intermediate Standard Arabic II</td>
</tr>
<tr>
<td>NMC2103Y</td>
<td>Advanced Standard Arabic</td>
</tr>
<tr>
<td>NMC2110H</td>
<td>Al-Jahiz and His Debate Partners</td>
</tr>
<tr>
<td>NMC2111H</td>
<td>Medieval Arabic Rhetoric</td>
</tr>
<tr>
<td>NMC2130H</td>
<td>Adab and Arabic Literary Prose</td>
</tr>
<tr>
<td>NMC2131H</td>
<td>Premodern Arabic Poetry</td>
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#### Aramaic-Syriac Language and Literature

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>NMC1100Y</td>
<td>Introduction to Aramaic</td>
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#### Archaeology

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>NMC1400H</td>
<td>The Archaeology of the Pre- and Protohistoric Civilizations of the Near East</td>
</tr>
<tr>
<td>NMC1404H</td>
<td>Archaeological Reconstructions of Pottery Production and Consumption in the Middle Euphrates</td>
</tr>
<tr>
<td>NMC1406Y</td>
<td>Problems in the Archaeology of Bronze Age Syria-Palestine</td>
</tr>
<tr>
<td>NMC1408Y</td>
<td>Seminar in the Archaeology of Syria-Palestine</td>
</tr>
<tr>
<td>NMC1409H</td>
<td>Archaeology and Material Culture of Ancient Egypt I</td>
</tr>
<tr>
<td>NMC1410H</td>
<td>Archaeology and Material Culture of Ancient Egypt II</td>
</tr>
<tr>
<td>NMC1411H</td>
<td>Near Eastern Ceramics I</td>
</tr>
<tr>
<td>NMC1412H</td>
<td>Near Eastern Ceramics II</td>
</tr>
<tr>
<td>NMC1414H</td>
<td>Egyptian Artifacts</td>
</tr>
<tr>
<td>NMC1416H</td>
<td>Egyptian Iconography</td>
</tr>
<tr>
<td>NMC1418Y</td>
<td>Archaeology of Nubia</td>
</tr>
<tr>
<td>NMC1419Y</td>
<td>Art, Architecture and Culture of Egypt in the Age of the Pyramids</td>
</tr>
<tr>
<td>NMC1420H</td>
<td>Selected Topics in Near Eastern Archaeology</td>
</tr>
<tr>
<td>NMC1421H</td>
<td>Seminar in Egyptian Archaeology I</td>
</tr>
<tr>
<td>NMC1422H</td>
<td>Seminar in Egyptian Archaeology II</td>
</tr>
<tr>
<td>NMC1423H</td>
<td>Ancient Iraq</td>
</tr>
<tr>
<td>NMC1424H</td>
<td>The Art and Archaeology of Syria</td>
</tr>
<tr>
<td>NMC1425H</td>
<td>Mesopotamian Material Culture — Art versus Artifact</td>
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<tr>
<td>NMC1426H</td>
<td>Sacred or Secular Space — Mesopotamian Architecture in Context</td>
</tr>
<tr>
<td>NMC1427H</td>
<td>Archaeology of State Societies</td>
</tr>
<tr>
<td>NMC1430H</td>
<td>Warfare — The Archaeology of Conflict</td>
</tr>
<tr>
<td>NMC1500Y</td>
<td>Archaeology, from Alexander to Muhammad</td>
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### Hebrew Language and Literature

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1306H</td>
<td>Scribes, Manuscripts, and Translations of the Hebrew Bible</td>
</tr>
<tr>
<td>NMC1307H</td>
<td>History of Ancient Israel</td>
</tr>
<tr>
<td>NMC1308H</td>
<td>Readings in Hebrew Bible</td>
</tr>
<tr>
<td>NMC1310H</td>
<td>Readings in Second Temple Period Texts</td>
</tr>
<tr>
<td>NMC1313H</td>
<td>Mishnah and Tosefta</td>
</tr>
<tr>
<td>NMC1314H</td>
<td>Law in Ancient Judaism</td>
</tr>
<tr>
<td>NMC1315H</td>
<td>Advanced Readings in the Dead Sea Scrolls</td>
</tr>
<tr>
<td>NMC1316H</td>
<td>Modern Hebrew Poetry</td>
</tr>
<tr>
<td>NMC1317H</td>
<td>Modern Hebrew Prose</td>
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<tr>
<td>NMC1318H</td>
<td>Midreshei Halakha: Purity and Cultic Texts</td>
</tr>
<tr>
<td>NMC1327H</td>
<td>Themes in Midrashic Literature</td>
</tr>
<tr>
<td>NMC1328H</td>
<td>Intertextuality: Tannaitic and Amoaric Literature</td>
</tr>
<tr>
<td>NMC1330H</td>
<td>Introduction to Modern Hebrew I</td>
</tr>
<tr>
<td>NMC1331H</td>
<td>Introduction to Modern Hebrew II</td>
</tr>
<tr>
<td>NMC1332H</td>
<td>Intermediate Modern Hebrew I</td>
</tr>
<tr>
<td>NMC1333H</td>
<td>Intermediate Modern Hebrew II</td>
</tr>
<tr>
<td>NMC1334H</td>
<td>Advanced Modern Hebrew I</td>
</tr>
<tr>
<td>NMC1335H</td>
<td>Advanced Modern Hebrew II</td>
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<td>NMC1336H</td>
<td>Modern Academic Hebrew</td>
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### History

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1010H</td>
<td>Mesopotamian Society and Economy</td>
</tr>
<tr>
<td>NMC1020H</td>
<td>Ancient Mesopotamia I: Sumerians and Akkadians</td>
</tr>
<tr>
<td>NMC1021H</td>
<td>Ancient Mesopotamia II: Assyrians and Babylonians</td>
</tr>
<tr>
<td>NMC1022H</td>
<td>The Babylonian City</td>
</tr>
<tr>
<td>NMC1023H</td>
<td>The Neo-Assyrian Empire</td>
</tr>
<tr>
<td>NMC2080H</td>
<td>Theory and Method in Middle Eastern Studies</td>
</tr>
<tr>
<td>NMC2081H</td>
<td>Anthropology of the Middle East</td>
</tr>
<tr>
<td>NMC2090Y</td>
<td>The Prophet and the Caliphates: Early Islamic History to 1258</td>
</tr>
<tr>
<td>NMC2117H</td>
<td>Readings in Medieval Arabic Chronicles</td>
</tr>
<tr>
<td>NMC2119H</td>
<td>Readings in Medieval Arabic Documents</td>
</tr>
<tr>
<td>NMC2129H</td>
<td>Arabic Manuscript Studies (prerequisite: NMC2101Y or NML211Y or equivalent)</td>
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### Islamic Art and Material Culture

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>NMC2541Y</td>
<td>Contextualizing Medieval Middle Eastern and Islamic Pottery</td>
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### Topics in Law and Religion

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>NMC1605H</td>
<td>Special Topics in Comparative Religious Law</td>
</tr>
<tr>
<td>NMC1608H</td>
<td>Gender Issues in Jewish Law</td>
</tr>
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### Linguistics

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1651H</td>
<td>Phoenician and Punic Epigraphy</td>
</tr>
<tr>
<td>NMC1653H</td>
<td>Issues in Ancient Hebrew Philology</td>
</tr>
<tr>
<td>NMC1654H</td>
<td>Advanced Ancient Hebrew Grammar</td>
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<tr>
<td>NMC1655H</td>
<td>Comparative Semitics</td>
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### Persian Studies

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC2200Y</td>
<td>Introductory Persian</td>
</tr>
<tr>
<td>NMC2201Y</td>
<td>Intermediate Persian</td>
</tr>
<tr>
<td>NMC2202H</td>
<td>Modern Persian Poetry (prerequisite: NMC2201Y)</td>
</tr>
<tr>
<td>NMC2203H</td>
<td>Structural Development of Iranian Language (prerequisite: NMC2201Y)</td>
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### Religion and Philosophy

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC1613Y</td>
<td>Ancient Near Eastern Religion (PhD students in Near and Middle Eastern Civilizations excluded)</td>
</tr>
<tr>
<td>NMC1614Y</td>
<td>Ancient Egyptian Religion (PhD students in Near and Middle Eastern Civilizations excluded)</td>
</tr>
<tr>
<td>NMC2045Y</td>
<td>Islamic Philosophical Texts</td>
</tr>
<tr>
<td>NMC2052H</td>
<td>Islamic Religious Thought</td>
</tr>
<tr>
<td>NMC2055H</td>
<td>The Qur'an and Its Interpretation</td>
</tr>
<tr>
<td>NMC2056H</td>
<td>Readings in Qur'an and Tafsir</td>
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### Turkish and Ottoman Studies

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NMC2300Y</td>
<td>Introductory Turkish</td>
</tr>
<tr>
<td>NMC2301Y</td>
<td>Intermediate Turkish</td>
</tr>
<tr>
<td>NMC2330Y</td>
<td>Readings in Ottoman Historical Texts</td>
</tr>
<tr>
<td>NMC2331Y</td>
<td>Ottoman Palaeography and Diplomats</td>
</tr>
<tr>
<td>NMC2340Y</td>
<td>Studies in Ottoman and Turkish Literature</td>
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<tr>
<td>JNE2320H</td>
<td>Modern Turkey</td>
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### Other Courses

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<tr>
<td>NMC2000H</td>
<td>Directed Reading</td>
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<tr>
<td>NMC2000Y</td>
<td>Directed Reading</td>
</tr>
<tr>
<td>NMC2001H</td>
<td>Directed Reading and Research</td>
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</table>
Nursing Science

Nursing Science: Introduction

Faculty Affiliation

Nursing

Degree Programs

Nursing Science

MN

- Fields:
  - Clinical Nursing;
  - Health Systems Leadership and Administration;
  - Nurse Practitioner

- Emphases (Nurse Practitioner field only):
  - Adult;
  - Paediatric;
  - Primary Health Care — Global Health

DN

PhD

Diploma Programs

Post-Master's Nurse Practitioner (PMNP)

DipNP

- Emphases:
  - Adult;
  - Paediatric;
  - Primary Health Care — Global Health

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Nursing Science, PhD

- Aging, Palliative and Supportive Care Across the Life Course
  - Nursing Science, MN, PhD

- Bioethics
  - Nursing Science, MN, PhD

- Global Health (U of T Global Scholar)
  - Nursing Science, PhD

- Resuscitation Sciences (admissions have been administratively suspended)
  - Nursing Science, MN, PhD

- Women's Health
  - Nursing Science, MN, PhD

Overview

The Lawrence S. Bloomberg Faculty of Nursing is committed to student-centred learning that encompasses the principles of empowerment, engagement, discovery, diversity, equity, and knowledge transformation for nursing practice.

Students have opportunities to engage with expert clinicians, scientists, and theorists and have access to a variety of interprofessional and interdisciplinary experiences with other health profession Faculties, the University, and community partners. These resources enable students to develop their intellectual capacity; their research, critical thinking, judgment abilities; and skills required to be exemplar nurses, advanced practice nurses, leaders, scientists, scholars, and educators.

Contact and Address

Web: bloomberg.nursing.utoronto.ca
Email: ask.nursing@utoronto.ca
Telephone: (416) 978-8727
Fax: (416) 978-8222

Graduate Department of Nursing Science
University of Toronto
Suite 130, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Nursing Science: Graduate Faculty

Full Members

Angus, Janet - BScN, MSN, PhD
Chu, Charlene - BSc, BScN, MN, PhD
Cleverley, Kristin - BN, MSN, PhD
Conway, Aaron - PhD
Cranley, Lisa - BScN, MN, PhD
Dale, Craig - BSc, PhD
Dennis, Cindy-Lee - BScN, MSN, PhD
Gastaldo, Denise - BSN, MA, PhD
Grundy, Quinn - BScN, PhD
Hillan, Edith - MPH, MSc, PhD
Jibb, Lindsay - PhD
Johnston, Linda - BSc, PhD (Dean)
Mayo, Samantha - BSc, MN, PhD
McGillis, Linda - BHA, MSN, PhD
McGilton, Kathy - BScN, MN, PhD
Metcalfe, Kelly - BNSc, PhD
Muntaner, Carles - MHSc, MD, PhD
Nelson, Sioban - PhD
Parry, Monica - BScN, MSc, MEd, PhD
Peter-Hardtke, Elizabeth - BA, BSN, MSN, PhD
Puts, Martine - BN, MHSc, PhD
Stevens, Bonnie - BSc, MSN, PhD
Stinson, Jennifer - BScN, MSc, PhD
Stremler, Robyn - BSc, MASc, PhD, RN
Nursing Science: Nursing Science MN

Master of Nursing

Program Description

The MN program prepares advanced nurses with specialized knowledge, skills, and expertise in a defined area of nursing. The program offers three fields: Clinical Nursing; Health Systems Leadership and Administration; and Nurse Practitioner.

Field: Clinical Nursing

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Nursing Science’s additional admission requirements stated below.
- Applicants must hold the BScN degree of the University of Toronto or an equivalent degree. Applicants must have obtained at least a mid-B standing in the final year of undergraduate study and, in addition, must have obtained at least a B standing in the next-to-final year.
- Applicants must hold current registration as a Registered Nurse or equivalent.
- For further information about applying, please email connect.nursing@utoronto.ca or visit the website.

Program Requirements

- To qualify for the degree, students shall complete a program of study outlined by the Graduate Department of Nursing Science.
- **Coursework.** The MN program requires 5.0 full-course equivalents (FCEs) as follows:
  - NUR1170H, NUR1171H, NUR1174H, NUR1175H, NUR1176H, and NUR1177H;
  - a 1.0 FCE practicum-based course (NUR1179Y), which should be taken alone in the final session and only after completion of all other coursework and program requirements;
  - two elective field of study courses (1.0 FCE). One of these two field of study courses may be selected from outside the Faculty of Nursing.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
Field: Health Systems Leadership and Administration

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Nursing Science’s additional admission requirements stated below.
- Applicants must hold the BScN degree of the University of Toronto or an equivalent degree. Applicants must have obtained at least a mid-B standing in the final year of undergraduate study and, in addition, must have obtained at least a B standing in the next-to-final year.
- Applicants must hold current registration as a Registered Nurse or equivalent.
- For further information about applying, please email connect.nursing@utoronto.ca or visit the Nursing website.

Program Requirements

- To qualify for the degree, students shall complete a program of study outlined by the Graduate Department of Nursing Science.
- Coursework. The MN program requires 5.0 full-course equivalents (FCEs) including:
  - NUR1016H, NUR1027H, NUR1127H, NUR1151H, NUR1152H, NUR1156H, NUR1157H, and NUR1161H;
  - a 1.0 FCE practicum-based course (NUR1169Y), which should be taken alone in the final session and only after completion of all other coursework and program requirements.
- This field of study is offered in a hybrid learning format including online and required on-campus, in-class learning. There are two required on-campus learning periods: one embedded in NUR1151H in Year 1 and the second embedded in NUR1169Y in Year 2. Courses are prescribed and normally students progress through the program within a defined student cohort. Normally, successful completion of Year 1 courses is required for students to enter Year 2 of their program.
- Year 1 course sequencing:
  - Fall — NUR1156H and NUR1027H
  - Winter — NUR1127H and NUR1151H*
  - Summer — NUR1152H*
- Year 2 course sequencing:
  - Fall — NUR1016H and NUR1161H
  - Winter — NUR1157H
  - Summer — NUR1169Y*
- *NUR1151H and NUR1169Y both include a required on-campus, in-class learning experience. NUR1152H and NUR1169Y include a required practicum component and required eLearning activities.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Field: Nurse Practitioner

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Nursing Science’s additional admission requirements stated below.
- Applicants must hold the BScN degree of the University of Toronto or an equivalent degree. Applicants must have obtained at least a mid-B standing in the final year of undergraduate study and, in addition, must have obtained at least a B standing in the next-to-final year.
- Applicants must hold current registration as a Registered Nurse or equivalent and must have a minimum of two years of clinical experience as a Registered Nurse.
- For further information about applying, please email connect.nursing@utoronto.ca or visit the Nursing website.

Program Requirements

- To qualify for the degree, students shall complete a program of study outlined by the Graduate Department of Nursing Science.
- Coursework. The MN program requires 5.5 full-course equivalents (FCEs), including:
  - NUR1094H, NUR1095H, NUR1097H, and NUR1138H;
  - a combination of courses based on the student’s emphasis:
    - Adult: NUR1101H; NUR1115H; NUR1140H; NUR1141H; NUR1215H; and NUR1221Y or
    - Paediatric*: NUR1102H; NUR1116H and NUR1216H; NUR1144H; NUR1145H; and NUR1222Y or
    - Primary Health Care — Global Health: NUR1114H; NUR1117H and NUR1217H; NUR1142H; NUR1143H; and NUR1223Y
  - NUR1221Y, NUR1222Y, and NUR1223Y must be taken alone in the final session and only after completion of all other coursework and program requirements.
- This field of study is offered in a hybrid learning format including online and required on-campus, in-class learning.
- *The Paediatric emphasis is available to students every other year. Visit the Nursing website for details.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
Doctor of Nursing

Program Description

The Doctor of Nursing (DN) is a professional doctoral program designed to prepare nurses with the required skills to apply knowledge in diverse settings and (a) lead in dynamic, fast-paced, technologically advanced and sophisticated health-care environments and (b) teach in nursing education. Students will engage in advanced education related to leadership and knowledge application in health-care or nursing education.

The DN is offered in a hybrid online (required courses) and on-site (required residencies) delivery model. Students will normally complete this full-time program in eight sessions compressed over three years due to cohort-based delivery and extensive use of the Summer sessions.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Nursing Science's additional admission requirements stated below.
- Applicants must have a master's degree in nursing or a closely related field, such as education, public health, health science, health policy, or business administration, with a minimum B+ standing from a recognized university.
- Applicants must hold current registration as a Registered Nurse and must have a minimum of two years of relevant health-care leadership experience or advanced nursing education teaching experience.
- Applicants must provide three reference letters: two work-related and one academic.
- Applicants must submit a letter of intent outlining their reasons for applying to the program and a proposed thesis project.
- Applicants whose primary language is not English and who have graduated from a university where the primary language of instruction and examination is not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs) as follows:
  - 1.5 required FCEs: NUR1301H, NUR1302H, and NUR1303H
  - 0.5 elective FCE relevant to the student’s focus: NUR1331H, NUR1332H, NUR1333H, NUR1334H, or NUR1335H
  - 2.0 FCEs in seminar courses: NUR1311H, NUR1312H, NUR1313H, and NUR1314H.
- Internships or practica. Students must complete two internships (health-care leadership) or two practica (educational leadership).
- Residencies. Students must complete three residencies consisting of intensive on-campus classes.
- Symposium. In the final session, students will present their thesis and discuss knowledge transfer and exchange plans for implementing their innovations in practice, policy, and/or education.
- Literature review paper. Students must demonstrate their ability to review, analyze, and synthesize relevant material by the end of the third session (Year 1). The paper includes published and peer-reviewed research, gray literature, policies, guidelines, etc.
- Thesis. Students must complete a written thesis proposal by the end of the fifth session (Year 2). The thesis requires students to identify and investigate a practice problem, articulate and apply theory and evidence to the problem, design strategies for action to address the problem, report on strategies implemented to address the problem, and discuss the results and knowledge dissemination plan.
- Doctoral Final Oral Examination (FOE). Students must complete an FOE of the thesis by the end of the final session in Year 3.

Program Length

4 years

Time Limit

6 years

Doctor of Philosophy

Program Description

The full-time PhD program prepares scientists with the required analytical and research skills to study nursing, health systems, or other related problems.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree; or 2) transfer from the University of Toronto MN program.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Graduate Department of Nursing Science’s additional admission requirements stated below. Applicants must have a master’s degree or its equivalent in nursing or related field with at least a B+ standing from a recognized university.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
Program Requirements

Courses

Successful completion of all required courses by the end of Year 2 in the program.

- Students must successfully complete a minimum of 3.0 full-course equivalents (FCEs) that include:
  - PhD Seminar (1.0 FCE)
  - Research methods course NUR1079Y Research Methods for Knowledge Discovery (1.0 FCE)
  - one course (0.5 FCE) related to the substantive area of study and thesis plans
  - one course (0.5 FCE) may be either a method or substantive area course as determined by the student and the supervisory committee.

- Students must attain a minimum average standing at the B+ level for required courses.

- Students are normally expected to complete all required courses (3.0 FCEs) by the end of Year 2. If all required courses are not successfully completed (with a minimum average standing at the B+ level) by the end of Year 3, the Faculty of Nursing will normally make a recommendation to SGS for termination of registration.

Literature Review Paper

Successful completion of the literature review paper.

- The literature review paper topic as well as type and format of the literature review paper must be approved by the supervisor (with signed documentation by the student and supervisor) by March 1 of Year 1. This agreement should specify the problem statement, the format/type of literature review that is appropriate to the area of study, and to the scholarly traditions within which the student’s research is situated.

- The literature review paper must be submitted by September 30 of Year 2. The submitted literature review paper will be formally reviewed and evaluated by the supervisor and at least one additional thesis committee member. Written and verbal feedback about the submitted literature review paper will be provided to the student at a supervisory committee meeting. For the literature review paper to be considered a pass, both faculty members’ assessments of the literature review paper must be at the successful completion or pass level. If both examinations are considered pass, the student may receive either a satisfactory or excellent rating at their supervisory committee meeting. If one or both paper reviews are rated unsatisfactory or not pass, then the student receives an unsatisfactory rating at the supervisory committee meeting.

- If the student does not successfully complete the literature review paper first submitted, the student will have one additional opportunity to revise and rewrite the literature review paper, based on the feedback received at the supervisory committee. The student must resubmit the revised literature review paper by December 1 of Year 2. This revised literature review paper must be formally evaluated by the supervisor and one other thesis committee member (normally the same committee member who completed the assessment of the original literature review paper). The student will receive feedback about the revised literature review paper at a supervisory committee meeting. For the literature review to be considered a pass, both faculty members’ assessments of the literature review must be at the pass level. If both reviews are considered pass, the student may receive either a satisfactory or excellent rating at their supervisory committee meeting. If one or both reviews are rated failure/not pass, then the student receives an unsatisfactory rating at the supervisory committee meeting.

- If the student does not successfully complete the literature review paper on the second attempt, the Faculty of Nursing will normally recommend to SGS that the student’s registration in the PhD program be terminated.

Thesis Proposal

Successful defence of the thesis proposal, normally by the end of Year 2.

- Students are normally expected to defend their thesis proposal by the end of Year 2 of their program. Students must successfully defend their thesis proposal no later than the end of Year 3. The format of the proposal will be similar to that of a modified tri-council grant application. Assessment of the thesis proposal consists of both the written proposal and the oral defence of the proposal. Students who do not successfully defend the proposal after the first attempt may have one additional opportunity to successfully present and defend the written proposal, and this must be accomplished before the end of Year 3 of the program.

- If the student does not successfully defend the thesis proposal by the end of Year 3 (including a second attempt, if required), the Faculty of Nursing will recommend to SGS that the student’s registration in the PhD program be terminated.

- The student’s dissertation will be defended in the Doctoral Final Oral Examination of the School of Graduate Studies.

Program Length

4 years full-time; 5 years transfer-from-master's

Time Limit

6 years full-time; 7 years transfer-from-master's
Nursing Science: Nursing Science PMNP Diploma

Post-Master's Nurse Practitioner (PMNP) Diploma

Program Description

The PMNP Diploma provides students holding an appropriate graduate degree the opportunity to develop the knowledge and skills required to practise as a nurse practitioner. Students choose one of the following emphases: Adult, Paediatric, or Primary Health Care — Global Health.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Nursing Science's additional admission requirements stated below.
- Applicants to the Post-Master's Nurse Practitioner (PMNP) diploma program must have completed a master's degree in nursing or an equivalent graduate degree that includes clinical nursing experience and a minimum of two years of clinical nursing experience.
- Preference is given to applicants who have one or more years in an advanced nursing practice role (in addition to clinical experience) and support within their employment setting.
- Applicants must hold current registration as a Registered Nurse or equivalent.

Program Requirements

All students in the PMNP diploma program are required to complete a total of 3.5 full-course equivalents (FCEs) as follows:

- Emphasis: Adult
  - NUR1101H Advanced Health Assessment and Clinical Reasoning (Adult)
  - NUR1115H Advanced Health Assessment and Therapeutic Management (Adult) 1
  - NUR1140H Pathophysiology and Pharmacotherapeutics 1 (Adult)
  - NUR1141H Pathophysiology and Pharmacotherapeutics 2 (Adult)
  - NUR1215H Advanced Health Assessment and Therapeutic Management (Adult) 2
  - NUR1221Y Nurse Practitioners: Roles and Issues (Adult)
- Emphasis: Paediatric
  - NUR1102H Advanced Health Assessment and Clinical Reasoning (Paediatric)
  - NUR1116H Advanced Health Assessment and Therapeutic Management (Paediatric) 1
  - NUR1144H Pathophysiology and Pharmacotherapeutics 1 (Paediatric)
  - NUR1145H Pathophysiology and Pharmacotherapeutics 2 (Paediatric)
  - NUR1216H Advanced Health Assessment and Therapeutic Management (Paediatric) 2
  - NUR1222Y Nurse Practitioners: Roles and Issues (Paediatric)
- Emphasis: Primary Health Care — Global Health
  - NUR1114H Advanced Health Assessment and Clinical Reasoning (Primary Health Care — Global Health) 1
  - NUR1142H Pathophysiology and Pharmacotherapeutics 1 (Primary Health Care — Global Health)
  - NUR1143H Pathophysiology and Pharmacotherapeutics 2 (Primary Health Care — Global Health)
  - NUR1217H Advanced Health Assessment and Therapeutic Management (Primary Health Care — Global Health) 2
  - NUR1223Y Nurse Practitioners: Roles and Issues (Primary Health Care — Global Health)
- NUR1221Y, NUR1222Y, and NUR1223Y must be taken alone in the final session and only after completion of all other coursework and program requirements.
- In each emphasis, four courses require learners to be engaged in clinical practice.

Program Length

6 sessions (2 years) part-time

Time Limit

6 years part-time

Nursing Science: Nursing Science MN, DN, PhD, Diploma Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NUR1016H</td>
<td>Health Systems, Policy, and the Profession</td>
</tr>
<tr>
<td>NUR1021H</td>
<td>Nursing Ethics</td>
</tr>
<tr>
<td>NUR1024H</td>
<td>Foundations of Qualitative Inquiry</td>
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<tr>
<td>NUR1025H</td>
<td>Doing Qualitative Research: Design and Data Collection</td>
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<tr>
<td>NUR1027H</td>
<td>Integrated Approaches to Research Appraisal and Utilization Part 1</td>
</tr>
<tr>
<td>NUR1030H</td>
<td>Principles of Leadership and Advanced Clinical Practice in Emergency Preparedness</td>
</tr>
<tr>
<td>NUR1036H</td>
<td>Advanced Nursing Practice in Oncology</td>
</tr>
<tr>
<td>NUR1038H</td>
<td>Social Determinants of Health in a Global Context</td>
</tr>
<tr>
<td>NUR1040H</td>
<td>Issues in Women's Health Care</td>
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<tr>
<td>NUR1045H</td>
<td>Theories of Pain: Impact on the Individual, Family, and Society</td>
</tr>
<tr>
<td>NUR1046H</td>
<td>Persistent Illness: Theoretical, Research, and Practice Implications</td>
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<td>NUR1047H</td>
<td>Community Participation and Health</td>
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<tr>
<td>NUR1050H</td>
<td>Coping With Illness</td>
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<tr>
<td>NUR1057H</td>
<td>Interventions to Enhance Health, Abilities, and Well-being</td>
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<tr>
<td>NUR1059H</td>
<td>Technology, Digital Health, and Informatics for Advanced Practice Nursing</td>
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<tr>
<td>NUR1062H</td>
<td>Measuring Nursing Care Effectiveness: Economic and Financial Perspectives</td>
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<tr>
<td>NUR1067H</td>
<td>Mental Health Topics in Advanced Practice Nursing</td>
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<tr>
<td>NUR1074H</td>
<td>Facilitating Learning: Nursing Perspectives</td>
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<tr>
<td>NUR1075H</td>
<td>Introductory Statistics for Health Sciences Research</td>
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<tr>
<td>NUR1076H</td>
<td>Intermediate Statistics for Health Sciences Research</td>
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<tr>
<td>NUR1077H</td>
<td>Implementation Science in Healthcare (Prerequisite: NUR1027H or equivalent)</td>
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<tr>
<td>NUR1079Y</td>
<td>Research Methods for Knowledge Discovery</td>
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<td>NUR1081Y</td>
<td>PhD Student/Faculty Seminars</td>
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<tr>
<td>NUR1083H</td>
<td>Comparing Politics of Health Policy in Globalizing World</td>
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<td>NUR1085H</td>
<td>Topics in Critical Perspectives in Health and Health Care</td>
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<tr>
<td>NUR1086H</td>
<td>Nursing Health Services Research Methods</td>
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<tr>
<td>NUR1087H</td>
<td>Foundations of Clinical Research</td>
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<tr>
<td>NUR1094H</td>
<td>Research Design, Appraisal, and Utilization: Nurse Practitioner</td>
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<td>NUR1095H</td>
<td>Introduction to Qualitative Research: Methodologies, Appraisal, and Knowledge Translation: Nurse Practitioner</td>
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<tr>
<td>NUR1097H</td>
<td>Program Planning and Evaluation in Nursing: Nurse Practitioner (Prerequisite: NUR1094H)</td>
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<tr>
<td>NUR1101H</td>
<td>Advanced Health Assessment and Clinical Reasoning (Adult) (Prerequisite: NUR1140H and NUR1141H)</td>
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<td>NUR1102H</td>
<td>Advanced Health Assessment and Clinical Reasoning (Paediatric) (Prerequisite: NUR1144H and NUR1145H)</td>
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<tr>
<td>NUR1114H</td>
<td>Advanced Health Assessment and Clinical Reasoning (Primary Health Care — Global Health) (Prerequisite: NUR1142H and NUR1143H)</td>
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<tr>
<td>NUR1115H</td>
<td>Advanced Health Assessment and Therapeutic Management (Adult) 1 (Prerequisites: NUR1101H, NUR1140H, NUR1141H)</td>
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<td>NUR1116H</td>
<td>Advanced Health Assessment and Therapeutic Management (Paediatric) 1</td>
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<tr>
<td>NUR1117H</td>
<td>Advanced Health Assessment and Therapeutic Management (Primary Health Care — Global Health) 1 (Prerequisites: NUR1114H, NUR1142H, NUR1143H)</td>
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<tr>
<td>NUR1127H</td>
<td>Integrated Approaches to Research Appraisal and Utilization Part 2 (Prerequisite: NUR1027H)</td>
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<td>NUR1138H</td>
<td>Global Health Topics for Nurse Practitioners</td>
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<tr>
<td>NUR1140H</td>
<td>Pathophysiology and Pharmacotherapeutics 1 (Adult)</td>
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<tr>
<td>NUR1141H</td>
<td>Pathophysiology and Pharmacotherapeutics 2 (Adult)</td>
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<tr>
<td>NUR1142H</td>
<td>Pathophysiology and Pharmacotherapeutics 1 (Primary Health Care — Global Health)</td>
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<td>NUR1145H</td>
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<tr>
<td>NUR1151H</td>
<td>Theories and Concepts in Nursing Leadership and Administration</td>
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<tr>
<td>NUR1152H</td>
<td>Leading and Managing Effective Health Care Teams</td>
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<tr>
<td>NUR1156H</td>
<td>History of Ideas in Nursing Practice: Health Systems Leadership and Administration</td>
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<tr>
<td>NUR1157H</td>
<td>Program Planning and Evaluation in Nursing: Health Systems Leadership and Administration (Prerequisite: NUR1027H)</td>
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<tr>
<td>NUR1161H</td>
<td>Advanced Concepts in Leadership and Administration (Prerequisites: NUR1151H, NUR1152H)</td>
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<tr>
<td>NUR1169Y</td>
<td>Advanced Nursing Practice Scholarship: Health Systems Leadership and Administration</td>
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<tr>
<td>NUR1170H</td>
<td>Introduction to Advanced Practice Nursing</td>
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<tr>
<td>NUR1171H</td>
<td>Topics in Advanced Practice Nursing</td>
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<tr>
<td>NUR1174H</td>
<td>Research Design, Appraisal, and Utilization: Clinical</td>
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<tr>
<td>NUR1175H</td>
<td>Introduction to Qualitative Research: Methodologies, Appraisal, and Knowledge Translation: Clinical</td>
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<td>NUR1176H</td>
<td>History of Ideas in Nursing Practice: Clinical</td>
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<td>NUR1177H</td>
<td>Program Planning and Evaluation in Nursing: Clinical (Prerequisite: NUR1174H)</td>
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<td>NUR1179H</td>
<td>Advanced Nursing Practice Scholarship: Clinical</td>
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<td>NUR1215H</td>
<td>Advanced Health Assessment and Therapeutic Management (Adult) 2</td>
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<td>NUR1216H</td>
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<td>NUR1217H</td>
<td>Advanced Health Assessment and Therapeutic Management (PHC GH) 2</td>
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<td>NUR1221Y</td>
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<td>NUR1301H</td>
<td>Leadership: Health Services and Education</td>
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<td>NUR1302H</td>
<td>Implementation Science: Health Services and Education</td>
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<td>NUR1303H</td>
<td>Policy and Politics in Nursing Practice and Education</td>
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<td>NUR1311H</td>
<td>DN Seminar 1 (Credit/No Credit)</td>
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<td>NUR1312H</td>
<td>DN Seminar 2 (Credit/No Credit; prerequisite: NUR1311H)</td>
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<tr>
<td>NUR1313H</td>
<td>DN Seminar 3 (Credit/No Credit; prerequisite: NUR1312H)</td>
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<tr>
<td>NUR1314H</td>
<td>DN Seminar 4 (Credit/No Credit. Must be taken in the final session of the DN program. All other DN courses must be completed prior to enrolment in NUR1314H.)</td>
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<td>NUR1331H</td>
<td>Analysis and Application of Individual and Population Health Data</td>
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<td>NUR1332H</td>
<td>Informatics and Technologies for Practice Advancement</td>
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<td>NUR1333H</td>
<td>Equity and Ethics in Healthcare Leadership</td>
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<tr>
<td>NUR1334H</td>
<td>Quality Improvement, Safety, and Evaluation Science</td>
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<tr>
<td>NUR1335H</td>
<td>The Scholarship of Teaching and Learning in Healthcare Practice and Education</td>
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</tbody>
</table>
Nutritional Sciences

Nutritional Sciences: Introduction

Faculty Affiliation

Medicine

Degree Programs

Nutritional Sciences

MSc and PhD

Combined Degree Programs

• STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Food Studies
  o Nutritional Sciences, MSc, PhD
• Indigenous Health
  o Nutritional Sciences, MSc, PhD
• Public Health Policy
  o Nutritional Sciences, MSc, PhD
• Women’s Health
  o Nutritional Sciences, MSc, PhD
• Toxicology
  o Nutritional Sciences, MSc, PhD

Overview

The Department of Nutritional Sciences is one of the few departments of nutrition in North America to be located within a Faculty of Medicine. This, together with its close linkages with the University of Toronto’s Dalla Lana School of Public Health, allows the department to fully explore the relationships between nutrition and human health and disease, and to influence clinical practice and public health programs. It also creates unique opportunities for collaboration with the highest concentration of University-affiliated hospitals, clinicians, and health researchers in North America.

Although the department is centered in the Basic Sciences sector of the Faculty, its activities include not only basic science but also clinical and community aspects of nutrition and food and nutrition policy. These activities that range from “bench to bedside to populations” make it a model of integration within the whole of the health sciences complex at U of T, enabling a full exploration of the relationships between nutrition and human health to influence both clinical practice and public health policy.

Applicants interested in pursuing a Master of Public Health degree in Nutrition and Dietetics are advised to consult the calendar entry of the Dalla Lana School of Public Health for details.

Contact and Address

Web: nutrisci.med.utoronto.ca
Email: grad.nutrisci@utoronto.ca
Telephone: (416) 978-6071
Fax: (416) 978-5882

Department of Nutritional Sciences
Temerty Faculty of Medicine, University of Toronto
Medical Sciences Building, 5th Floor, Room 5253A
1 King’s College Circle, Toronto, Ontario, Canada M5S 1A8

Nutritional Sciences: Graduate Faculty

Full Members

Allard, Johane - MD
Anderson, Harvey - BSc, MSc, PhD
Bandsma, Robert - MD
Bazinet, Richard - BSc, PhD
Bhatta, Zulfiqar - MBBS, PhD
Boyd, Norman - MD
Comelli, Elena - MSc, PhD (Graduate Coordinator, Admissions and Awards)
Courtney-Martin, Glenda - BASc, MSc, PhD
El-Sohemy, Ahmed - BSc, MSc, PhD
Hamilton, Jill - BSc, MSc, MD
Hanley, Anthony - BSc, MSc, PhD
Jenkins, David Ja - BA, MA, MD, MB, BS, PhD
Kim, Young-In - MD
Kotsopoulos, Joanne - BSc, MSc, PhD
L’Abbé, Mary - BSc, MSc, PhD
Leiter, Lawrence - BSc, MD
Maguire, Jonathon - BSc, MSc, MSc, MD
Narod, Steven - BSc, MD
O’Connor, Deborah - BASc, MS, PhD (Chair and Graduate Chair)
Pencharz, Paul - MD, MB, ChB
Roth, Daniel - BSc, MSc, MD
Sellen, Daniel - BA, AM, PhD
Sherman, Philip - MD
Sievenpiper, John - BASc, MFS, MD, PhD
Tarasuk, Valerie - BA, BEd, BASc, MSc, PhD (Associate Chair, Graduate Education)
Vuksan, Vladimir - BSc, MSc, PhD
Zlotkin, Stanley - BSc, MD, PhD

Members Emeriti

Bruce, Robert - BSc, LMCC, MSc, MD, PhD
Greenwood, Carol - BSc, MSc, PhD
Jeejeebhoy, Khursheed - MB, PhD
Krondl, Maria - BSc, PhD
Rao, A. Venketeshwara - BSc, MSc, PhD
Thompson, Lilian - BSc, MSc, PhD
Wolever, Thomas - BA, MSc, MA, BM, BCh, PhD
Associate Members

Abdelaal, Elsayed - BSc, MSc, PhD
Arcand, Jo Anne - BSc, MSc, PhD
Asztalos, Elizabeth - BSc N
Ball, Ronald - BSc, MSc, PhD
Beaudry, Jacqueline - BSc, MSc, PhD
Birken, Catherine - MSc, MD
Boucher, Beatrice Ann - BSc, MHSc
Fox, Ann - BAA, MHSc, PhD
Josse, Robert - BSc, MBBS
Labonte, Marie-Eve - BSc, MSc, PhD
Levitt, Anthony - MBBS, DGO, MB
Ma, David - BSc, PhD
Malik, Vasanti - BS, MS, ScD
Musa-Veloso, Kathy - BSc, MSc, PhD
Pausova, Zdenka - MD
Potvin Kent, Monique - BA, BA, MA, PhD
Unger, Sharon - MD, MD
Yeung, David - BA, MA, PhD

For students with undergraduate training in nutritional sciences, at least one of these courses must be taken in the department. Students with undergraduate training in disciplines other than nutritional sciences must take at least two half courses from the department.

A course in statistical methods or research design and analysis is required if not completed previously.

**Thesis** on an approved research area and its defence at an oral examination.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Nutritional Sciences: Nutritional Sciences

MSc

Master of Science

Program Description

The aim of the MSc program is to develop the student's abilities to conceptualize research problems in the area of human nutrition, synthesize ideas and approaches in the research problem, analyze and interpret data, transmit his or her findings to peers, and expand his or her knowledge in, and perspective of, the field of human nutrition. Thus, major emphasis is placed on the research project and thesis.

The MSc program can be taken on a full-time or part-time basis. A limited number of students are admitted to the program on a part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Students with diverse backgrounds are encouraged to apply. Applicants must also satisfy the Department of Nutritional Sciences' additional admission requirements stated below.
- A- standing in the final two years of a bachelor's degree program or evidence of strong potential as a researcher.

Program Requirements

- **Coursework.** Students must complete 2.0 full-course equivalents (FCEs) as follows:
  - participation in NFS1204Y *Master's Seminars in Nutritional Sciences* (1.0 FCE) throughout their period of full-time registration and
  - a minimum of two half courses (1.0 FCE).

PhD

Doctor of Philosophy

Program Description

The aim of the PhD program is to develop the student's abilities to conceptualize research problems in the area of human nutrition, synthesize ideas and approaches in the research problem, analyze and interpret data, transmit their findings to peers, and expand their knowledge in, and perspective of, the field of human nutrition. Thus, major emphasis is placed on the research project and thesis.

Applicants may enter the PhD program via one of three routes: 1) following completion of an MSc degree; 2) transfer from the University of Toronto MASc program; or 3) direct entry following completion a bachelor's degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Department of Nutritional Sciences' additional admission requirements stated below.
- Applicants may enter the PhD program with an appropriate MSc degree with at least an A- standing or evidence of strong potential as a researcher. Exceptional students may be allowed to reclassify (transfer) into the PhD program after one year without completing the MSc on the recommendation of an advisory committee and successful completion of a reclassification examination.
Program Requirements

- Coursework. Students must complete 3.0 full-course equivalents (FCEs) as follows:
  - NFS1304Y Doctoral Seminars in Nutritional Sciences
  - a minimum of four half courses (2.0 FCEs)
- The courses will be chosen by each student to provide an appropriate background for their area of investigation. It is expected that all students will have an adequate knowledge of research design and statistics through coursework in their past or the current graduate program. The choice of courses will be made in consultation with the supervisor and the student’s advisory committee and is subject to the approval of the department.
- Successful completion of a PhD qualifying examination in nutritional sciences is required by the end of Year 1. The examination is designed to ensure that students have developed a rigorous and comprehensive research proposal in a timely fashion. The oral examination is approximately two hours long, is graded as pass/fail, and takes place approximately nine months following initial registration. The examination will be conducted by the PhD Qualifying Examination Committee consisting of two faculty members appointed by the department and two faculty members chosen by the student. A student who fails the first attempt at the exam will be permitted one more attempt. Failure of the second attempt will result in a recommendation for program termination.
- Thesis.
  - Student must pass the departmental examination before proceeding to the Doctoral Final Oral Examination.
  - The residence requirement is two years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.
  - It is expected that students can complete their PhD in a period of four years of full-time study, research, and thesis preparation; however, some students may require longer.

Program Length

4 years full-time; 5 years transfer-from-master's

Time Limit

6 years full-time; 7 years transfer-from-master's

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Department of Nutritional Sciences’ additional admission requirements stated below.
- Applicants may enter the PhD program directly from a bachelor’s degree if their background is deemed appropriate and they have an A– or better average in their final two years.

Program Requirements

- Coursework. Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - NFS1304Y Doctoral Seminars in Nutritional Sciences
  - a minimum of six half courses (3.0 FCEs)
- The courses will be chosen by each student to provide an appropriate background for their area of investigation. It is expected that all students will have an adequate knowledge of research design and statistics through coursework in their past or the current graduate program. The choice of courses will be made in consultation with the supervisor and the student’s advisory committee and is subject to the approval of the department.
- Successful completion of a PhD qualifying examination in nutritional sciences is required by the end of Year 1. The examination is designed to ensure that students have developed a rigorous and comprehensive research proposal in a timely fashion. The oral examination is approximately two hours long, is graded as pass/fail, and takes place approximately nine months following initial registration. The examination will be conducted by the PhD Qualifying Examination Committee consisting of two faculty members appointed by the department and two faculty members chosen by the student. A student who fails the first attempt at the exam will be permitted one more attempt. Failure of the second attempt will result in a recommendation for program termination.
- Thesis.
  - Student must pass the departmental examination before proceeding to the Doctoral Final Oral Examination.
  - The residence requirement is three years, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.
  - It is expected that students can complete their PhD in a period of five years of full-time study, research, and thesis preparation; however, some students may require longer.

Program Length

5 years

Time Limit

7 years

Nutritional Sciences: Nutritional Sciences MSc, PhD Courses

Not all courses are offered every year. Please consult the department regarding course offerings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFS1201H</td>
<td>Public Health Nutrition</td>
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<tr>
<td>NFS1204Y</td>
<td>Master's Seminars in Nutritional Sciences (Credit/No Credit)</td>
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<tr>
<td>NFS1208H</td>
<td>Foundations of Practice I</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
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<tr>
<td>NFS1209Y</td>
<td>Foundations of Practice II</td>
</tr>
<tr>
<td>NFS1210H</td>
<td>Foundations of Practice III</td>
</tr>
<tr>
<td>NFS1211H</td>
<td>Community Nutrition</td>
</tr>
<tr>
<td>NFS1212H</td>
<td>Regulation of Food Composition, Health Claims, and Safety</td>
</tr>
<tr>
<td>NFS1216H</td>
<td>Selected Topics in Nutrition</td>
</tr>
<tr>
<td>NFS1218H</td>
<td>Recent Advances in Nutritional Sciences I</td>
</tr>
<tr>
<td>NFS1220H</td>
<td>Clinical Nutrition</td>
</tr>
<tr>
<td>NFS1221H</td>
<td>Nutrition Programs and Strategies</td>
</tr>
<tr>
<td>NFS1222H</td>
<td>Recent Advances in Nutritional Sciences II: Diet and Cardiovascular</td>
</tr>
<tr>
<td>NFS1223H</td>
<td>Dietary Carbohydrate and Glycaemic Index in Health and Disease</td>
</tr>
<tr>
<td>NFS1224H</td>
<td>Nutritional Epidemiology</td>
</tr>
<tr>
<td>NFS1225H</td>
<td>Nutrition and Metabolism for Public Health Nutrition Professionals</td>
</tr>
<tr>
<td>NFS1226H</td>
<td>Nutrition and Cancer</td>
</tr>
<tr>
<td>NFS1301H</td>
<td>Directed Reading in Nutritional Sciences</td>
</tr>
<tr>
<td>NFS1304Y</td>
<td>Doctoral Seminars in Nutritional Sciences (Credit/No Credit)</td>
</tr>
<tr>
<td>NFS1484H</td>
<td>Advanced Nutrition</td>
</tr>
</tbody>
</table>

\(^0\) Course that may continue over a program. Credit is given when the course is completed.
Occupational Science and Occupational Therapy

Occupational Science and Occupational Therapy: Introduction

Faculty Affiliation

Medicine

Degree Programs

Occupational Therapy

MScOT

Collaborative Specializations

The following collaborative specialization is available to students in the participating degree program as listed below:

- Women’s Health
  - Occupational Therapy, MScOT

Overview

The Department of Occupational Science and Occupational Therapy is committed to providing graduate and continuing education programs that enable occupational therapists to be leaders in research, clinical practice, and the promotion of health and well-being. Core and clinical faculty members provide dynamic, evidence-based, and comprehensive instruction and mentorship. Graduates are innovative professionals focused on enabling occupation and enhancing health and well-being.

Since September 2018, the MScOT is offered both at the St. George (downtown Toronto) campus and at the University of Toronto Mississauga (UTM) campus. Applicants will have an opportunity to indicate their preferred campus. Campus preferences will be considered but they are not guaranteed.

Contact and Address

Web: ot.utoronto.ca
Email: ot.reception@utoronto.ca
Telephone: (416) 946-8571
Fax: (416) 946-8570

Department of Occupational Science and Occupational Therapy
University of Toronto
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Occupational Science and Occupational Therapy: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Astell, Arlene - BSc, PhD
Cameron, Jill - BSc, MS, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Colquhoun, Heather - PhD
Dawson, Deirdre - BSc, MSc, PhD
Friefeld, Sharon - BSc(OT), MA, PhD
King, Gillian - BA, MA, PhD
Kirsh, Bonnie - BSc(OT), MEd, PhD
Mihailidis, Alex - BASc, MASc, PhD
Nalder, Emily - BTh, PhD
Rappolt, Susan - BSc(OT), MSc, PhD
Reed, Nick - BA, MSc, PhD
Renwick, Rebecca - DipOT, BA, PhD

Members Emeriti

Friedland, Judith - BA, MA, PhD
Mckee, Patricia - DipOT, BSc(OT), MSc
Polatajko-Howell, Helene J. - PhD
Reid, Denise - BSc(OT), MEd, PhD

Associate Members

Barker, Donna - BSc(OT), MSc
Cockburn, Lynn - BSc(OT), BCom, MEd, MPH, PhD
David-Brumer, Naomi - BSc(OT)
Eftekhar, Parvin - BSc(OT), MSc, PhD
Farragher, Janine - PhD
Farrow, Susan - BSc(OT), BA
Fourt, Anne - BSc(OT), MEd
Hamdani, Yani - MA, PhD
Hitig, Sander - PhD
Ho, Emily - BSc(OT), MEd, PhD, PhD
Hunt, Anne - MSc, PhD
Kingsnorth, Shauna - BS, MA, PhD
Langlois, Sylvia - BSc, MSc
Lowe, Amanda Mandy - BSc(OT), MS
Mansfield, Elizabeth - MSc, PhD
Markouakis, Roula - MSc, PhD
Nowrouzi-Kia, Behdin - BSc, MSc
Pain, Liza - PhD
Reel, Kevin - BSc(OT), MSc
Rowland, Paula - BS, BS
Shpigelman Rotenberg, Shlomit - PhD
Stier, Jill - MA, BMEdSc
Trentham, Barry - BSc(OT), MES, PhD
Vasquez, Brandon - BS, MA, PhD
Wang, Rosalie - BSc, BSc(OT), PhD
Wasilewski, Marina B. - BSc, MSc, PhD
Occupational Science and Occupational Therapy: Occupational Therapy MScOT

Master of Science in Occupational Therapy

Program Description

The MScOT program prepares students in advanced academic and professional knowledge and applied research skills for leadership in occupational therapy practice. The program emphasizes the application of theory and research evidence to clinical practice through rigorous studies in occupational therapy and research production and utilization.

Graduates are eligible to write the certification examination of the Canadian Association of Occupational Therapists, a requirement for registration with the College of Occupational Therapists of Ontario and most other professional regulatory colleges in Canada. Practice in another country generally requires the graduate to pass the licensing requirement specific to that country. Graduates are eligible to:

- practise independently in a variety of roles, such as consultants and case managers, and in a range of settings, such as acute care, interdisciplinary programs, private practice, and primary health care;
- supervise rehabilitation assistants, OT aides, or other support workers;
- use principles of research-based practice to guide and evaluate service delivery;
- contribute to research that will advance the knowledge base of the discipline;
- assume management roles;
- take leadership roles in the profession;
- take leadership roles in health care and other sectors including social services, education, and labour;
- fill academic-practitioner positions; and
- pursue doctoral studies and careers in academia or clinical research.

The MScOT program is offered as a two-year full-time program. Admissions to the one-year, advanced-standing part-time option have been suspended.

MScOT Program (24-Month Full-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Occupational Science and Occupational Therapy's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university with high academic standing and a mid-B average or better in the final year of study.
- To determine initial ranking only, the department will review the last 10.0 full-course equivalents (FCEs) completed at the undergraduate level by the application deadline.
- Apply online using the Ontario Rehabilitation Sciences Programs Application Service (ORPAS). Applications are accepted around October each year, with a deadline near the end of December or early January. Exact deadlines are posted on the ORPAS website and in the ORPAS Instruction Booklet.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must provide proof of English proficiency by March 1 of the year of application. See General Regulations, section 4.3 English-Language Proficiency in this calendar for general information and acceptable tests. The department strongly prefers the Test of English as a Foreign Language (TOEFL) and requires a minimum score of:
  - 600 on the paper-based test, accompanied by a minimum score of 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test with 22/30 on the speaking section and 22/30 on the writing section.
- TOEFL candidates should request that results be sent to institution code 0982.
- Visit the Occupational Therapy and ORPAS websites for additional information regarding application document submissions (e.g., confidential assessment forms, résumé, personal statement submission).

Program Requirements

- The MScOT is a two-year, 24-course (18.5-FCE) program of continuous, full-time study.
- Students begin their studies in September and complete six consecutive sessions, with a range of four to six concurrent courses in each session.
- There are four full-time block fieldwork components within the program of study.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

MScOT Program (12-Month, Advanced-Standing Part-Time Option)

Admissions to the advanced-standing option have been suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Occupational Science and
Occupational Therapy's additional admission requirements stated below.

- A bachelor's degree in occupational therapy from a recognized university with high academic standing and a mid-B average or better in the final year of study.
- Applicants must be registered, or eligible for registration, for independent practice as an occupational therapist in Canada with a provincial regulating body.
- Apply online using the SGS online application system. Applications are accepted approximately in mid-February each year, with a deadline approximately at the end of March (subject to change).
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must provide proof of English proficiency by March 1 of the year of application. See General Regulations, section 4.3 English-Language Proficiency in this calendar for general information and acceptable tests. The department strongly prefers the Test of English as a Foreign Language (TOEFL) and requires a minimum score of:
  - 600 on the paper-based test, accompanied by a minimum score of 5 on the Test of Written English (TWE)
  - 100/120 on the Internet-based test with 22/30 on the speaking section and 22/30 on the writing section.
  - TOEFL candidates should request that results be sent to institution code 0982.
- Visit the Occupational Therapy website for additional information regarding application document submissions (e.g., reference letters, resumé, personal statement submission).

Program Requirements

- The advanced-standing option is a three-consecutive-session, part-time program of study beginning in September. Students must complete 3.5 full-course equivalents (FCEs): OCT1111Y, OCT1122Y+, and OCT1220Y.
- Students complete the advanced-standing option in an online environment with a mandatory one-week, on-campus residency.
- For more information about the application process, tuition, and supervision, etc., please visit the Occupational Science and Occupational Therapy website.

Program Length

3 sessions part-time (typical registration sequence: F/W/S)

Time Limit

3 years part-time

Required Courses for the 24-Month Full-Time Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT1100H</td>
<td>Applied Skills and Technology: Human Factors and Design in Occupational Therapy</td>
</tr>
<tr>
<td>OCT1111Y</td>
<td>Occupational Science: Foundations for Occupational Therapy</td>
</tr>
<tr>
<td>OCT1122Y+</td>
<td>Research Approaches and Methods in Occupational Therapy</td>
</tr>
<tr>
<td>OCT1131H</td>
<td>Occupational Therapy Practice I</td>
</tr>
<tr>
<td>OCT1132H</td>
<td>Occupational Therapy Practice II</td>
</tr>
<tr>
<td>OCT1141H</td>
<td>Assessment in Occupational Therapy</td>
</tr>
<tr>
<td>OCT1152Y</td>
<td>Musculo-Skeletal Foundations for Occupational Therapy Practice</td>
</tr>
<tr>
<td>OCT1162Y</td>
<td>Mental Health Foundations for Occupational Therapy Practice</td>
</tr>
<tr>
<td>OCT1172Y+</td>
<td>Neurological Foundations for Occupational Therapy Practice</td>
</tr>
<tr>
<td>OCT1183Y</td>
<td>Occupational Therapy Fieldwork I</td>
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<tr>
<td>OCT1190Y</td>
<td>Building Practice Through Mentorship</td>
</tr>
<tr>
<td>OCT1193H</td>
<td>Enabling Occupation Across the Life Course</td>
</tr>
<tr>
<td>OCT1220Y+</td>
<td>Graduate Research Project (1.5 FCEs)</td>
</tr>
<tr>
<td>OCT1233H</td>
<td>Occupational Therapy Practice III</td>
</tr>
<tr>
<td>OCT1236H</td>
<td>Transition to Occupational Therapy Practice</td>
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<tr>
<td>OCT1251H</td>
<td>Enabling Occupation with Children: Part I</td>
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<tr>
<td>OCT1252H</td>
<td>Enabling Occupation with Children: Part II</td>
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<td>OCT1261H</td>
<td>Enabling Occupation with Adults: Part I</td>
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<td>OCT1262Y</td>
<td>Enabling Occupation with Adults: Part II</td>
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<td>OCT1271H</td>
<td>Enabling Occupation with Older Adults: Part I</td>
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<td>OCT1272H</td>
<td>Enabling Occupation with Older Adults: Part II</td>
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<td>OCT1281Y</td>
<td>Occupational Therapy Fieldwork II</td>
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<tr>
<td>OCT1282Y+</td>
<td>Occupational Therapy Fieldwork III</td>
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<tr>
<td>OCT1283Y</td>
<td>Occupational Therapy Fieldwork IV</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

© Course that may continue over a program. The course is graded when completed.
## Required Courses for the 12-Month, Advanced-Standing Part-Time Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>OCT1111Y</td>
<td>Occupational Science: Foundations for Occupational Therapy</td>
</tr>
<tr>
<td>OCT1122Y*</td>
<td>Research Approaches and Methods in Occupational Therapy</td>
</tr>
<tr>
<td>OCT1220Y0</td>
<td>Graduate Research Project (1.5 FCEs)</td>
</tr>
</tbody>
</table>

* Course that may continue over a program. The course is graded when completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Pharmaceutical Sciences

Pharmaceutical Sciences: Introduction

Faculty Affiliation

Pharmacy

Degree Programs

Pharmaceutical Sciences

MS and PhD

- Fields:
  - Biomolecular Pharmaceutical Sciences;
  - Clinical, Social, and Administrative Pharmaceutical Sciences

Pharmacy

MScPhm

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Pharmaceutical Sciences, MSc, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Pharmaceutical Sciences, MSc, PhD
- Bioethics
  - Pharmaceutical Sciences, MSc, PhD
- Biomedical Engineering
  - Pharmaceutical Sciences, MSc, PhD
- Cardiovascular Sciences
  - Pharmaceutical Sciences, MSc, PhD
- Global Health (U of T Global Scholar)
  - Pharmaceutical Sciences, MSc, PhD
- Health Services and Policy Research
  - Pharmaceutical Sciences, MSc, PhD
- Neuroscience
  - Pharmaceutical Sciences, MSc, PhD
- Next-Generation Precision Medicine
  - Pharmaceutical Sciences, PhD
- Toxicology
  - Pharmaceutical Sciences, MSc, PhD

Overview

Pharmaceutical sciences encompasses all aspects of the discovery, development, administration, distribution, and utilization of therapeutic drugs, and the nature, functioning, and dysfunctioning of the biological systems with which drugs interact. As a global leader in pharmaceutical research, the Leslie Dan Faculty of Pharmacy is home to some of the most prominent and distinguished experts in the area of pharmaceutical sciences. The department is centrally located in the heart of Toronto’s Health Sciences Discovery District. Students have the opportunity to conduct their research in collaboration with a wide range of departments at the University of Toronto and nearby world-class teaching hospitals and research institutes to solve some of health science’s most pressing problems.

A degree in Pharmaceutical Sciences can lead to a variety of career opportunities. Graduates have found employment in academia, the pharmaceutical industry, government, community or hospital pharmacy, consulting, and other businesses.

The Graduate Department of Pharmaceutical Sciences offers research opportunities and courses in two fields of study:

- Biomolecular Pharmaceutical Sciences: drug receptor interactions, molecular biology, electrophysiology, biochemistry, clinical, adverse drug reactions, drug metabolism; pharmaceutical and medicinal chemistry, pharmaceutical formulations, radiopharmaceutical synthesis, drug discovery, biophysical chemistry, basic pharmacokinetics, and clinical research;
- Clinical, Social, and Administrative Pharmaceutical Sciences: clinical and pharmacy practice, sociology of health, social psychology, health policy, and health economics.

Contact and Address

Web: pharmacy.utoronto.ca/programs/graduate-department-pharmaceutical-sciences
Email: phm.grad@utoronto.ca
Telephone: (416) 978-8896
Fax: (416) 978-8511

Graduate Department of Pharmaceutical Sciences
Leslie Dan Faculty of Pharmacy
University of Toronto
144 College Street
Toronto, Ontario M5S 3M2
Canada

Pharmaceutical Sciences: Graduate Faculty

Full Members

Allen, Christine - BSc, PhD, PhD
Angers, Stéphane - BSc, PhD (Associate Dean, Research)
Austin, Zubin - BA, BScPhm, MBA, MEd, MIST, PhD (Academic Director, Centre for Practice Excellence)
Bendayan, Reina - DP
Boon, Heather - PhD
Cadarette, Suzanne - BSc, MSc, PhD (Graduate Coordinator)
Chalikian, Tigran - PhD
Crandall, Ian - BSc, MSc, PhD (Graduate Coordinator)
Cummins, Carolyn - BSc, PhD
Dolovich, Lisa - MSc (Dean)
Pharmaceutical Sciences: Pharmaceutical Sciences MSc

Master of Science

Program Description

The Graduate Department of Pharmaceutical Sciences at the Leslie Dan Faculty of Pharmacy offers students in the physical, biological, clinical, and social sciences a challenging and rewarding research-intensive program leading to the MSc degree. The result is an educational program that encourages multidisciplinary approaches to problems and collaboration between students and faculty members. Graduate students participating in this process are immersed in a challenging program that equips them with new ways of thinking and provides them with multiple tools to approach problems.

The MSc program can be taken on a full-time or part-time basis. All admission and program requirements are the same for the full-time and part-time options. A limited number of students will be admitted to the part-time option.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences’ additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university with at least a mid-B average in each of the last two years of undergraduate study.
- The Pharmaceutical Sciences Graduate Admissions Committee considers the applicant’s background and accomplishments, academic standing, and financial support from the potential supervisor.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination is not English, must demonstrate facility in the English language through the successful completion of one of the following English-language proficiency tests:
  - Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - International English Language Testing System (IELTS): a score of 7.0 (Academic) with at least 6.5 in each component.
  - The Certificate of Proficiency in English (COPE): a score of 76, with at least 22 in each component and 32 in the writing component.
  - Academic Preparation Course: a final grade of B in Level 60.
- If the undergraduate degree was not obtained from a recognized Canadian or US university, the applicant must write and achieve scores at the 50th percentile ranking or better on the Graduate Record Examination (GRE; General Test).
Program Requirements

- The MSc is a program of study that provides the appropriate foundation for thesis research. The program depends on the student's background and is planned in consultation with the supervisor and advisory committee, with the approval of the graduate director.
- Coursework. Students must successfully complete a minimum of 1.0 full-course equivalent (FCE).
- Yearly advisory committee meetings.
- Attend at least one research ethics workshop (0.0 FCE) for graduate students.
- One poster presentation to all faculty and graduate students at Graduate Research in Progress (GRIP).
- Annual attendance at GRIP.
- Regular attendance at a minimum of eight Pharmaceutical Sciences departmental seminars as well as student group seminars for two years (or less if all other program requirements are completed).
- An oral presentation of the student's own research work is given in the student seminar series after the first 12 months of registration in the program.
- Final seminar to be given during the thesis defence.
- A thesis based on an approved research problem in an area of pharmaceutical sciences.

Program Length

6 sessions full-time (typical registration sequence:
F/W/S/F/W/S);
14 sessions part-time

Time Limit

3 years full-time;
6 years part-time

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences' additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum overall B+ average.
- The Pharmaceutical Sciences Graduate Admissions Committee considers the applicant's background and accomplishments, academic standing, and financial support from the potential supervisor.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination is not English, must demonstrate facility in the English language through the successful completion of one of the following English-language proficiency tests:
  - Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
    - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - International English Language Testing System (IELTS): a score of 7.0 (Academic) with at least 6.5 in each component.
  - The Certificate of Proficiency in English (COPE): a score of 76, with at least 22 in each component and 32 in the writing component.
  - Academic Preparation Course: a final grade of B in Level 60.
- If the undergraduate degree was not obtained from a recognized Canadian or US university, the applicant must write the Graduate Record Examination (GRE; General Test) and achieve scores at the 50th percentile ranking or better on the Verbal and Quantitative components and a minimum score of 5.0 on the Analytical Writing component.

Program Requirements

- The PhD is a program of study that provides the appropriate foundation for thesis research. The program depends on the student's background and is planned in consultation with the supervisor and advisory committee, as well as with the approval of the graduate chair.
- Coursework. Students normally complete 2.0 full-course equivalents (FCEs) within the first three years of registration.
- Yearly advisory committee meetings.
- Successful completion of a PhD qualifying examination within the first 24 months of the program. Students are permitted a second attempt, if necessary, to satisfactorily complete the examination. The format of the examination will include the student giving a 20-minute presentation based on the proposal distributed to the Qualifying Examination Committee, followed by a question period. The student is expected to demonstrate appropriate understanding of the scientific basis of the research, the methodological approaches, and the technical details. Failure to successfully complete the PhD qualifying examination will result in a recommendation for termination of registration in the program.

Pharmaceutical Sciences: Pharmaceutical Sciences PhD

Doctor of Philosophy

Program Description

The Graduate Department of Pharmaceutical Sciences offers a challenging and rewarding research-intensive program leading to the PhD degree. Students in the program are immersed in pharmaceutical sciences, working and collaborating with world-renowned researchers while gaining profound depth and experience in their area of study.

Applicants may enter the PhD program via one of three routes: 1) following completion of an appropriate master's degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of an appropriate bachelor's degree.
• Attend at least one research ethics workshop (0.0 FCE) for graduate students. Students who completed this requirement while registered in the MSc program are not required to attend a second workshop.
• One poster presentation to all faculty and graduate students at Graduate Research in Progress (GRIP).
• Annual attendance at GRIP.
• Regular attendance at a minimum of eight Pharmaceutical Sciences departmental seminars as well as student group seminars in each academic year for four years (or less if all other program requirements are completed).
• In the student seminar series, students must give an oral research presentation of approximately 20 to 30 minutes every year after the first 12 months of registration in the program.
• An open final oral presentation (50 minutes long) immediately prior to a closed thesis defence.
• A thesis in conformity with University of Toronto regulations, based on research conducted while registered in a PhD program at the University of Toronto.
• Students must be on campus and participate full-time (including Summer) until all program requirements are completed. Simultaneous registration in another full-time degree program is not allowed.

Program Length
4 years

Time Limit
6 years

PhD Program (Transfer)

Transfer Requirements

• Students who have a high academic standing and a clearly demonstrated ability to do research at the doctoral level may be eligible to transfer to the PhD program after one year in the MSc program. The student must have completed at least 1.0 full-course equivalent (FCE) with an average grade of A– during Year 1 of the master’s program, and must have financial support.
• A transfer from the MSc program to the PhD program occurs normally within 15 to 18 months of the student's first registration in the MSc program.

Program Requirements

• Coursework. Students must successfully complete a total of 3.0 full-course equivalents (FCEs).
• Successful completion of the MSc to PhD transfer examination.
• The transferred student must complete all remaining course requirements of the MSc program, except the thesis, in addition to the requirements of the PhD program. Credit is given in the doctoral program for research and graduate courses completed prior to the transfer.

• Yearly advisory committee meetings.
• Attend at least one research ethics workshop (0.0 FCE) for graduate students. Students who completed this requirement while registered in the MSc program are not required to attend a second workshop.
• Two poster presentations to all faculty and graduate students at Graduate Research in Progress (GRIP), one of which may be at a peer-reviewed conference upon approval.
• Annual attendance at GRIP.
• Regular attendance at a minimum of eight Pharmaceutical Sciences departmental seminars as well as student group seminars in each academic year for four years (or less if all other program requirements are completed).
• In the student seminar series, students must give an oral research presentation of approximately 20 to 30 minutes every year.
• An open final oral presentation (50 minutes long) immediately prior to a closed thesis defence.
• A thesis in conformity with University of Toronto regulations, based on research conducted while registered in a PhD program at the University of Toronto.
• Students must be on campus and participate full-time (including Summer) until all program requirements are completed. Simultaneous registration in another full-time degree program is not allowed.

Program Length
5 years

Time Limit
7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences' additional admission requirements stated below.
• Under exceptional circumstances, students may be admitted directly to the PhD program with an appropriate bachelor's degree from a recognized university with a minimum A– (80%) average, or its equivalent, in senior-level courses.
• The Pharmaceutical Sciences Graduate Admissions Committee considers the applicant's background and accomplishments, academic standing, and financial support from the potential supervisor.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination is not English, must demonstrate facility in the English language through the successful completion of one of the following English-language proficiency tests:
  ○ Test of English as a Foreign Language (TOEFL) with the following minimum scores:
Program Requirements

- The PhD is a program of study that provides the appropriate foundation for thesis research. The program depends on the student's background and is planned in consultation with the supervisor and advisory committee, as well as with the approval of the graduate chair.
- Coursework. Students must successfully complete a total of 3.0 full-course equivalents (FCEs).
- Yearly advisory committee meetings.
- Successful completion of a PhD qualifying examination within the first 24 months of the program. Students are permitted a second attempt, if necessary, to satisfactorily complete the examination. The format of the examination will include the student giving a 20-minute presentation based on the proposal distributed to the Qualifying Examination Committee, followed by a question period. The student is expected to demonstrate appropriate understanding of the scientific basis of the research, the methodological approaches, and the technical details. Failure to successfully complete the PhD qualifying examination will result in a recommendation for termination of registration in the program.
- Attend at least one research ethics workshop (0.0 FCE) for graduate students. Students who completed this requirement while registered in the MSc program are not required to attend a second workshop.
- Two poster presentation(s) to all faculty and graduate students at Graduate Research in Progress (GRIP), one of which may be at a peer-reviewed conference upon approval.
- Annual attendance at GRIP.
- Regular attendance at a minimum of eight Pharmaceutical Sciences departmental seminars as well as student group seminars in each academic year for four years (or less if all other program requirements are completed).
- In the student seminar series, students must give an oral research presentation of approximately 20 to 30 minutes every year after the first 12 months of registration in the program.
- An open final oral presentation (50 minutes long) immediately prior to a closed thesis defence.
- A thesis in conformity with University of Toronto regulations, based on research conducted while registered in a PhD program at the University of Toronto.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences' additional admission requirements stated below.
- Appropriate master's degree from a recognized university with a minimum overall B+ average.
- The Pharmaceutical Sciences Graduate Admissions Committee considers the applicant's background and accomplishments, academic standing, and financial support from the potential supervisor.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination is not English are required to write the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - paper-based TOEFL: 600 and 5 on the Test of Written English (TWE)
  - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
- If the undergraduate degree was not obtained from a recognized Canadian or US university, the applicant must write the Graduate Record Examination (GRE; General Test) and achieve scores at the 50th percentile ranking or better on the Verbal and Quantitative components and a minimum score of 5.0 on the Analytical Writing component.

PhD Program (Flexible-Time)

The department offers a flexible-time PhD program option for selected students. This program benefits professionals with career obligations and whose employment is closely related to their intended area of research. Applicants must meet all the admission requirements for entry to the full-time PhD program in Pharmaceutical Sciences. The program requirements for the flexible-time PhD option are identical to those for the full-time PhD program.
Program Requirements

- The PhD is a program of study that provides the appropriate foundation for thesis research. The program depends on the student's background and is planned in consultation with the supervisor and advisory committee, with the approval of the graduate chair.
- **Coursework.** Students normally complete a total of 2.0 full-course equivalents (FCEs).
- Yearly advisory committee meetings.
- Successful completion of a PhD qualifying examination within the first 32 months of the program. Students are permitted a second attempt, if necessary, to satisfactorily complete the examination. The format of the examination will include the student giving a 20-minute presentation based on the proposal distributed to the Qualifying Examination Committee, followed by a question period. The student is expected to demonstrate appropriate understanding of the scientific basis of the research, the methodological approaches, and the technical details. Failure to successfully complete the PhD qualifying examination will result in a recommendation for termination of registration in the program.
- Attend at least one research ethics workshop (0.0 FCE) for graduate students. Students who completed this requirement while registered in the MSc program are not required to attend a second workshop.
- One poster presentation, or two poster presentations by those without a master's degree, to all faculty and graduate students at Graduate Research in Progress (GRIP).
- Annual attendance at GRIP.
- Regular attendance at a minimum of eight Pharmaceutical Sciences departmental seminars as well as student group seminars in each academic year for four years. Students whose current professional background is such that they would be deemed to have fulfilled a significant portion of the requirements contained in the department seminar series may be eligible for a reduction of four seminars upon consultation with the Director.
- In the student seminar series, students must give an oral research presentation of approximately 20 to 30 minutes every year after the first 12 months of registration in the program.
- An open final oral presentation (50 minutes long) immediately prior to a closed thesis defence.
- A thesis in conformity with University of Toronto regulations, based on research conducted while registered in a PhD program at the University of Toronto.
- Students must ensure that they have adequate time on campus to attend classes and to fulfill the academic requirements.
- Full-time registration is required for the first four years and thereafter, students may register part-time.

**Program Length**

8 years

**Time Limit**

8 years

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### Pharmaceutical Sciences: Pharmaceutical Sciences MSc, PhD Courses

Please consult the department's timetable for courses offered in a given year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHM1107H</td>
<td>Advanced Pharmacokinetics Course I</td>
</tr>
<tr>
<td>PHM1109H</td>
<td>Recent Developments in Dosage Form Design (prerequisite: PHM224Y or equivalent)</td>
</tr>
<tr>
<td>PHM1115H</td>
<td>Special Topics in Radiopharmaceuticals II</td>
</tr>
<tr>
<td>PHM1130H</td>
<td>Biomolecular Interactions and Thermodynamics I</td>
</tr>
<tr>
<td>PHM1133H</td>
<td>Special Topics in Pharmaceutical Sciences Reading Course</td>
</tr>
<tr>
<td>PHM1135H</td>
<td>Nanomedicines in Oncology</td>
</tr>
<tr>
<td>PHM1136H</td>
<td>Introduction to Biostatistics</td>
</tr>
<tr>
<td>PHM1137H</td>
<td>Introduction to Qualitative Research Methods in the Health Sciences</td>
</tr>
<tr>
<td>PHM1138H</td>
<td>Electronics for Pharmaceutics Applications</td>
</tr>
<tr>
<td>PHM1139H</td>
<td>Diagnosing Corruption in the Health Sector and Anti-Corruption Policies and Tools</td>
</tr>
<tr>
<td>PHM1140H</td>
<td>Principles of Synthetic Biology</td>
</tr>
<tr>
<td>PHM2100H</td>
<td>Pharmaceutical Sciences Module: Sciences in New Drugs and Biologics (0.25 FCE)</td>
</tr>
<tr>
<td>PHM2101H</td>
<td>Pharmaceutical Sciences Module: Precision in Vitro Diagnostics (0.25 FCE)</td>
</tr>
<tr>
<td>PHM2102H</td>
<td>Pharmaceutical Sciences Module: Introduction to Fundamentals of Drug Discovery Process (0.25 FCE)</td>
</tr>
<tr>
<td>JFK1122H</td>
<td>Drug Transport Across Biological Membranes</td>
</tr>
<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
</tr>
<tr>
<td>JNP1017H*</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
</tr>
<tr>
<td>JNP1018H*</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
</tr>
<tr>
<td>JRH1000H</td>
<td>Introduction to Pharmacoepidemiology</td>
</tr>
<tr>
<td>JRH5124H</td>
<td>Public Health Ethics</td>
</tr>
<tr>
<td>PAS3700H</td>
<td>Multidisciplinary Aspects of Addictions</td>
</tr>
<tr>
<td>PCL1004Y</td>
<td>Clinical Pharmacology</td>
</tr>
<tr>
<td>PPG2010H</td>
<td>Panel Data Methods for Public Policy Analysis</td>
</tr>
</tbody>
</table>

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
Pharmaceutical Sciences: Pharmacy
MScPhm

Master of Science in Pharmacy

Program Description

The Master of Science in Pharmacy (MScPhm) program is designed to train future academic clinical pharmacist leaders. As members of patient care teams and as pharmacy practice researchers, graduates of the MScPhm program will influence the provision of pharmaceutical care at the patient and population level. As teachers, they will shape the development of current and future pharmacists.

Applicants may apply to the Fall session only.

Full-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences' additional admission requirements stated below.
- Applicants must have status as a pharmacist, based on one of the following:
  - a bachelor's degree from a Canadian pharmacy program accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) or an American pharmacy program accredited by the Accreditation Council for Pharmacy Education (ACPE); or
  - a license to practise pharmacy (any Canadian jurisdiction); or
  - a bachelor's degree, or equivalent, from any international pharmacy school and successful completion of the Pharmacy Examining Board of Canada (PEBC) Evaluating Exam.
- Applicants with pharmacy practice experience, including completion of a Year 1 Pharmacy residency program, are preferred. Applicants must also have an equivalent of a University of Toronto B+ (77 to 79%) in the last two years of study and have identified a primary graduate supervisor for the program.

Program Requirements

- Each student's program will be tailored to suit the student's background and interests and will be planned in consultation with the supervisor and graduate advisory committee, with the approval of the graduate chair.
- Students must complete a minimum of 9.0 full-course equivalents (FCEs), including a clinical practicum (3.0 FCEs) and a research project (3.0 FCEs).
- Graduate advisory committee meetings will be held at minimum once each year.
- One poster presentation given to all faculty and graduate students at Graduate Research in Progress (GRIP).
- Annual attendance at GRIP.
- Regular attendance at the graduate departmental and student group seminars for two years.
- An oral presentation of the completed research work will be submitted and assessed at an oral examination.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Part-Time Option

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Pharmaceutical Sciences' additional admission requirements stated below.
- Applicants must have status as a pharmacist, based on one of the following:
  - a bachelor's degree from a Canadian pharmacy program accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) or an American pharmacy program accredited by the Accreditation Council for Pharmacy Education (ACPE); or
  - a license to practise pharmacy (any Canadian jurisdiction); or
  - a bachelor's degree, or equivalent, from any international pharmacy school and successful completion of the Pharmacy Examining Board of Canada (PEBC) Evaluating Exam.
- Applicants with pharmacy practice experience, including completion of a Year 1 Pharmacy residency program, are preferred. Applicants must also have an equivalent of a University of Toronto B+ (77 to 79%) in the last two years of study and have identified a primary graduate supervisor for the program.

Program Requirements

- Each student's program will be tailored to suit the student's background and interests and will be planned in consultation with the supervisor and graduate advisory committee, with the approval of the graduate chair.
- Students must complete a minimum of 9.0 full-course equivalents (FCEs), including a clinical practicum (3.0 FCEs) and a research project (3.0 FCEs).
- Graduate advisory committee meetings will be held at minimum once each year.
- One poster presentation given to all faculty and graduate students at Graduate Research in Progress (GRIP). Students will attend GRIP yearly.
- Regular attendance at the graduate departmental and student group seminars for four years.
• An oral presentation of the completed research work will be submitted and assessed at an oral examination.

Program Length

12 sessions part-time

Time Limit

6 years part-time

Pharmaceutical Sciences: Pharmacy

MScPhm Courses

Required Foundational Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHM1141H</td>
<td>Introduction to Education Theory, Practice, and Scholarship</td>
</tr>
<tr>
<td>PHM1142H</td>
<td>Methods for Patient-Focused and Pharmacy Practice Research</td>
</tr>
<tr>
<td>PHM1143H</td>
<td>Advanced Pharmacy Practice Leadership</td>
</tr>
</tbody>
</table>

Practica and Research Project

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHM8000Y</td>
<td>MScPhm Clinical Practicum I (Credit/No Credit; 1.5 FCEs.)</td>
</tr>
<tr>
<td>PHM8100Y</td>
<td>MScPhm Clinical Practicum II (Credit/No Credit; 1.5 FCEs.) (Prerequisite: PHM8000Y, which may be taken concurrently.)</td>
</tr>
<tr>
<td>PHM9000Y</td>
<td>MScPhm Research Practicum (Credit/No Credit. 3.0 FCEs.) (Prerequisite: PHM1142H, which may be taken concurrently.)</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PHM1107H</td>
<td>Advanced Pharmacokinetics Course I</td>
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<tr>
<td>PHM1138H</td>
<td>Electronics for Pharmaceutics Applications</td>
</tr>
<tr>
<td>AGE2000H</td>
<td>Principles of Aging</td>
</tr>
</tbody>
</table>
Pharmacology and Toxicology

Pharmacology and Toxicology: Introduction

Faculty Affiliation

Medicine

Degree Programs

Pharmacology

MSc

- Field:
  - Applied Clinical Pharmacology

PhD

Combined Degree Programs

- STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Pharmacology, MSc, PhD
- Cardiovascular Sciences
  - Pharmacology, MSc, PhD
- Musculoskeletal Sciences
  - Pharmacology, MSc, PhD
- Neuroscience
  - Pharmacology, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Pharmacology, MSc, PhD
- Toxicology
  - Pharmacology, MSc, PhD
- Women's Health
  - Pharmacology, MSc, PhD

Overview

Faculty in the Department of Pharmacology and Toxicology conduct research in the following areas:

- biochemical and molecular pharmacology
- cardiovascular pharmacology
- clinical pharmacology

- drug addiction
- drug metabolism, distribution, and pharmacokinetics
- endocrine pharmacology
- immunopharmacology
- neuropharmacology
- pharmacogenetics
- psychopharmacology
- receptor pharmacology
- second messengers and signal transduction
- toxicology

Contact and Address

Web: [www.pharmtox.utoronto.ca](http://www.pharmtox.utoronto.ca)
Email: pharmtox.dept@utoronto.ca
Telephone: (416) 978-3851

Department of Pharmacology and Toxicology
University of Toronto
Medical Sciences Building, 1 King's College Circle, Room 4207
Toronto, Ontario M5S 1A8
Canada

Pharmacology and Toxicology: Graduate Faculty

Full Members

Al-awar, Rima - PhD
Andreazza, Ana Cristina - BPhm, MSc, PhD, PhD
Boileau, Isabelle - PhD
Brands, Bruna - PhD
De Luca, Vincenzo - MD, PhD
Dorian, Paul - MSc, MDCH
George Bahl, Susan - MD
Goldstein, Benjamin - MD
Grant, Denis - BSc, PhD
Hampson, David - PhD
Ito, Shinya - MD, BM
Kish, Stephen John - BSc, MSc, PhD
Kolla, Nathan - BA, MA, MD, PhD
Kotsopoulos, Joanne - BSc, MSc, PhD
Le Foll, Bernard - MSc, DrMed, PhD
Matthews, Jason - PhD
McPherson, J. Peter - MSc, PhD (Coordinator of Graduate Studies)
Meyer, Jeffrey - MD
Mitchell, Jane - BSc, PhD
Mueller, Daniel - MD
Nobrega, Jose - PhD
Pang, Sandy - BSc, PhD
Parker, John - BA, MD
Piquette-Miller, Micheline - BScPhm, PhD
Ramsey, Amy - PhD
Riddick, David - BSc, PhD
Ross, Ruth Alexandra - PhD (Chair and Graduate Chair)
Roy, Peter John - BSc, PhD
Rusjan, Pablo - PhD
Salahpour, Ali - PhD
Salmena, Leonardo - PhD
Pharmacology and Toxicology: Pharmacology MSc (Thesis-Based Option)

Master of Science

Program Description

In the MSc program, students are expected to undertake self-directed study and demonstrate proficiency in pharmacological principles throughout the course of the program. They are able to engage in one of two formats of study: 1) thesis-based study or 2) course-based study in the field of Applied Clinical Pharmacology.

In the thesis-based study, students are expected to think critically about scientific issues and develop a knowledge base in pharmacology while formulating hypotheses in a specific area of pharmacological research. They will test their hypotheses through active research and present their investigations in a thesis.

In the course-based Applied Clinical Pharmacology field, students will engage in research and hands-on training in academic, commercial, health care, and/or government settings. Courses will feature a breadth of fundamental and applied pharmacology topics with emphasis on translational research.

The MSc program can be taken on a full-time or part-time basis.

MSc Program (Thesis-Based Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Pharmacology and Toxicology’s additional admission requirements stated below.
- Appropriate bachelor’s degree from a recognized university with a final-year average of at least a B+.
- Applicants are normally required to have taken courses in physiology, biochemistry, or applied sciences sufficient to form a foundation for their work in pharmacology.
- All successful applicants are responsible for obtaining research supervision and financial support before they are permitted to officially register in their program.

Program Requirements

- **Coursework.** Students must complete PCL1002Y Graduate Pharmacology (1.0 full-course equivalent [FCE]). The academic program may require additional coursework.
- Each student will present a departmental seminar after approximately one year in the program.
- Each student will participate in a research program and present the results of the investigation as a written thesis. The thesis will be evaluated and defended to the satisfaction of a thesis examination committee.
- MSc students in pharmacology who intend to continue their studies in the PhD program may choose to be evaluated during their MSc oral defence.
- Minimum period of one full year of residence, during which time the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the department’s activities associated with the program.

Program Length

- 6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
- 9 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time
Pharmacology and Toxicology:
Pharmacology MSc; Field: Applied Clinical Pharmacology

MSc Program: Applied Clinical Pharmacology
Field (Course-Based Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Pharmacology and Toxicology's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university with a final-year average of at least a B+.
- Applicants are normally required to have taken courses in physiology and biochemistry, or applied sciences sufficient to form a foundation for their work in pharmacology.

Program Requirements

Coursework. Students must complete 8.0 full-course equivalents (FCEs). The curriculum is designed in an integrated fashion such that each subsequent course reinforces and builds upon prior knowledge. Students are expected to complete the required courses in Year 1. Elective courses may be taken in either year with practicum opportunities offered following successful completion of the required courses.

- Year 1 required courses (6.0 FCEs); these courses are spread throughout the first 12 months of the program:
  - PCL1001Y Systems Pharmacology
  - PCL1002Y Graduate Pharmacology
  - PCL1004Y Clinical Pharmacology
  - PCL1100H Applied Skills in Clinical Pharmacology
  - PCL1101H Technology, Techniques, and Translation in Pharmacology and Toxicology
  - PCL1402H Pharmacology and Toxicology in Drug Development
  - PCL1491H Clinical Pharmacology: Principles in Practice
  - PCL2200Y Major Research Project.

Plus

- Elective courses (2.0 FCEs). Elective coursework is selected through consultation with the program director with the intention to allow individual students to tailor their degree towards their interests and career goals. Popular elective courses include:
  - PCL1300H Selected Topics in Clinical Pharmacology (Credit/No Credit)
  - PCL2100Y Practicum in Clinical Pharmacology (Credit/No Credit; 2.0 FCEs)
  - PCL2101Y Practicum in Clinical Pharmacology I (Credit/No Credit)
  - PCL2102Y Practicum in Clinical Pharmacology II (Credit/No Credit)
  - PCL2201Y Research Project Extended Study (Credit/No Credit)
  - APS1001H Project Management
  - CHL5201H Biostatistics I
  - JNP1014Y Interdisciplinary Toxicology
  - JPM1005Y Behavioural Pharmacology

Program Length

- 6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
- 9 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time

MSc Program: Applied Clinical Pharmacology
Field (Course-Based, Advanced-Standing Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Pharmacology and Toxicology's additional admission requirements stated below.
- An appropriate bachelor's degree from a recognized university with a final-year average of at least a B+.
- Applicants are normally required to have taken courses in physiology and biochemistry, or applied sciences sufficient to form a foundation for their work in pharmacology.
- At the discretion of the program director, applicants who demonstrate pharmacology knowledge that significantly overlaps with the Applied Clinical Pharmacology curriculum may be considered for advanced standing with either:
  - a bachelor's degree specializing in pharmacology or biomedical toxicology or
  - MD degree (undergraduate medical education) with coursework in pharmacology.

Program Requirements

Coursework. Students must complete at least 4.0 full-course equivalents (FCEs) as follows:

- PCL1002Y Graduate Pharmacology (1.0 FCE)
- PCL1004Y Clinical Pharmacology (1.0 FCE)
- PCL1100H Applied Skills in Clinical Pharmacology (0.5 FCE)
- PCL2200Y Major Research Project (1.0 FCE), starting in the Fall of Year 1.
- At least one half-course elective (0.5 FCE) chosen from the following list, and upon recommendation and approval by the program director:
  - PCL1101H Technology, Techniques, and Translation in Pharmacology and Toxicology
Pharmacology and Toxicology:
Pharmacology PhD

Doctor of Philosophy

Program Description

The objective of the PhD degree is to have students possess a comprehensive understanding of the general area of pharmacology, in addition to specific expertise in their particular area of interest. They build on their knowledge of pharmacology so that they are able to think critically about specific areas in pharmacology. They should be able to formulate and design, as well as carry out and interpret investigations. Their findings should be publishable. They should show capacity for continuing significant contributions in pharmacology and for conducting independent research.

Applicants may enter the PhD program via one of three routes: 1) following completion of an appropriate master’s degree; 2) transfer from the University of Toronto MSc program; or 3) direct entry following completion of an appropriate bachelor’s degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Pharmacology and Toxicology's additional admission requirements stated below.
- Appropriate master’s degree from a recognized university with an average of at least a B+ in master's degree courses.
- Applicants are normally required to have taken courses in physiology, biochemistry, or applied sciences sufficient to form a foundation for their work in pharmacology.
- The department determines the eligibility of prospective students. The department assesses the student's ability for advanced study and independent research in pharmacology.
- Students transferring from the master's program in Pharmacology to the PhD program may receive full credit for master's courses towards doctoral course requirements, with the department's permission.
- Well-qualified students with excellent research potential holding an appropriate bachelor’s degree from a recognized university may be considered for direct entry to the PhD program. These applicants must have achieved a minimum final-year average of A–.
- Applicants admitted without prior screening (i.e., with MSc degrees from other departments or universities, and students admitted with a bachelor's degree) will have their research ability reviewed after completion of one year. Upon successful completion of a departmental seminar and recommendation from the student's advisory committee, the student will be permitted to proceed with the PhD program.
- The department must be satisfied about the applicant's background, accomplishments, and financial support.
- All successful applicants are responsible for obtaining research supervision and financial support before they are permitted to officially register in their program.

Program Requirements

- **Coursework.** Students must complete 3.0 full-course equivalents (FCEs) as follows:
  - PCL1002Y Graduate Pharmacology (primary subject)
  - PCL1003Y0 Seminars in Pharmacology (Credit/No Credit)
  - 1.0 additional FCE (secondary subject)
  - Any other courses advised by the Graduate Education Committee. The student’s advisory committee should help the student determine the secondary course.
- Pharmacology graduate faculty members also offer a variety of laboratory-based and tutorial-based learning modules to provide breadth to the student's training experience beyond their particular areas of research focus. During their program, PhD students are required to choose four breadth modules from among available options. 0.5 FCE from outside the student's research area may substitute for one of the five breadth modules. The student's advisory committee will assist the student in choosing suitable modules.
- As part of the course requirement for PCL1003Y0 Seminars in Pharmacology, the student must present thesis material in seminars to the department on two occasions, one of which will take place between two and six months prior to the departmental Final Oral Examination.
- Each student will participate in a research program and present the results of the investigation as a written thesis. The thesis must be orally defended to the satisfaction of a thesis examination committee.
- Minimum period of two full years of residence, during which time the student is required to be on campus full-time and consequently in such geographical proximity as to be able to participate fully in the department's activities associated with the program.
Program Length

4 years full-time; 5 years transfer-from-master's; 5 years direct-entry

Time Limit

6 years full-time; 7 years transfer-from-master's; 7 years direct-entry

0 Course that may continue over a program. The course is graded when completed.

Pharmacology and Toxicology:
Pharmacology MSc, PhD Courses

The department should be consulted each session as to course offerings. Students may also find up-to-date course information on the departmental website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCL1001Y</td>
<td>Systems Pharmacology</td>
</tr>
<tr>
<td>PCL1002Y</td>
<td>Graduate Pharmacology</td>
</tr>
<tr>
<td>PCL1003Y⁰</td>
<td>Seminars in Pharmacology (Credit/No Credit)</td>
</tr>
<tr>
<td>PCL1004Y</td>
<td>Clinical Pharmacology</td>
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<tr>
<td>PCL1100H⁰</td>
<td>Applied Skills in Clinical Pharmacology</td>
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<tr>
<td>PCL1101H⁰</td>
<td>Technology, Techniques, and Translation in Pharmacology and Toxicology</td>
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<td>PCL1110H</td>
<td>Applied Skills in Clinical Pharmacology</td>
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<tr>
<td>PCL1300H</td>
<td>Selected Topics in Clinical Pharmacology and Toxicology (Credit/No Credit)</td>
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<tr>
<td>PCL1402H</td>
<td>Pharmacology and Toxicology in Drug Development</td>
</tr>
<tr>
<td>PCL1491H</td>
<td>Clinical Pharmacology: Principles in Practice (co-requisite: PCL1004Y or prior pharmacokinetics course)</td>
</tr>
<tr>
<td>PCL2100Y⁰</td>
<td>Practicum in Clinical Pharmacology (Credit/No Credit; 2.0 FCEs) (prerequisite: PCL1100H⁰)</td>
</tr>
<tr>
<td>PCL2101Y⁰</td>
<td>Practicum in Clinical Pharmacology I (Credit/No Credit) (prerequisite: PCL1100H⁰)</td>
</tr>
<tr>
<td>PCL2102Y⁰</td>
<td>Practicum in Clinical Pharmacology II (Credit/No Credit) (prerequisite: PCL1100H⁰)</td>
</tr>
<tr>
<td>PCL2200Y⁰</td>
<td>Major Research Project (prerequisite or co-requisite: PCL1100H⁰)</td>
</tr>
<tr>
<td>PCL2201Y⁰</td>
<td>Research Project Extended Study (Credit/No Credit) (prerequisite: PCL2200Y⁰)</td>
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<tr>
<td>CHL5201H</td>
<td>Biostatistics I (exclusion: LMP1407H)</td>
</tr>
<tr>
<td>JFK1121H</td>
<td>Selected Topics in Drug Development II</td>
</tr>
<tr>
<td>JFK1122H</td>
<td>Drug Transport Across Biological Membranes</td>
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<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
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<tr>
<td>JNP1016H</td>
<td>Graduate Seminar in Toxicology (prerequisite or co-requisite: JNP1014Y)</td>
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<tr>
<td>JNP1017H*</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
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<tr>
<td>JNP1018H*</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
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<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience: Cellular and Molecular</td>
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<tr>
<td>JPM1005Y</td>
<td>Behavioural Pharmacology</td>
</tr>
<tr>
<td>JYG1555H</td>
<td>Advanced Topics: Cellular and Molecular Neurobiology</td>
</tr>
</tbody>
</table>

⁰ Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Philosophy

Philosophy: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Philosophy

MA

- Concentration: Philosophy of Science

PhD

Combined Degree Programs

- STG, Law, Juris Doctor / Philosophy, PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Ancient and Medieval Philosophy
  - Philosophy, PhD
- Bioethics
  - Philosophy, MA, PhD
- Jewish Studies
  - Philosophy, MA, PhD
- Sexual Diversity Studies
  - Philosophy, MA, PhD
- Women and Gender Studies
  - Philosophy, MA, PhD

Overview

Philosophy has been taught at the University of Toronto since 1843. Much has changed in that time, but the department remains Canada’s preeminent philosophy department. It is an international leader in the history of philosophy — especially ancient and medieval philosophy — as well as ethics, philosophy of science, and philosophy of mind. In all of these areas, department members take contemporary philosophical problems and their historical antecedents to illuminate one another.

The department’s most distinctive strength is its broad coverage of the history of philosophy. While peer departments usually have one or two experts in a few historical periods, U of T has specialists in every area of the history of Western philosophy, as well as in aspects of the history of non-Western philosophy. This historical focus engages with other areas of strength: ethics, philosophy of science, and philosophy of mind.

Many U of T faculty working in these areas also study their history; they use that study to inform their contributions to contemporary debates. At the same time, these historians of philosophy benefit from and contribute to ground-breaking work in systematic philosophy. This integration of historical and systematic philosophy sets this department apart from other top philosophy departments where the history of philosophy is often segregated from the rest of the discipline.

Contact and Address

Web: philosophy.utoronto.ca
Email: graduate.phil@utoronto.ca
Telephone: (416) 978-3312
Fax: (416) 978-8703

Department of Philosophy
University of Toronto
Jackman Humanities Building (JHB)
Room 410, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Philosophy: Graduate Faculty

Full Members

Ainslie, Donald - BSc, MA, PhD
Allen, Derek - BA, BPhil, MA, DPhil
Allen, James - BA, PhD
Barney, Rachel - BA, PhD
Black, Deborah - BA, MA, PhD
Brown, James - BA, MA, PhD, FRSC
Caie, Michael - PhD
Charlow, Nathan - BA, MA, PhD
Clark, Philip - BA, MA, PhD
Comay, Rebecca - BA, MA, PhD
Cunningham, Frank A. - BA, MA, PhD
Dickie, Imogen - BA, BPhil, DPhil
Dyzenhaus, David - BA, LLB, DPhil
Franks, Paul - BA, MA, PhD
Gerson, Lloyd - BA, MA, PhD, FRSC
Gibbs, Robert - BA, MA, PhD
Gooch, Paul William - BA, MA, PhD
Heath, Joseph - BA, MA, PhD, FRSC
Helle, Benjamin - BA, PhD
Huber, Franz - MA, PhD
Hubner, Karolina - BA, MA, PhD
Hurka, Thomas - BA, BPhil, DPhil, FRSC
Hutchinson, Douglas - BA, BPhil, DPhil
Inwood, Brad - BA, MA, PhD, FRSC
Katz, Bernard - BA, MA, PhD
King, Peter - BA, PhD
Kingwell, Mark - BA, MA, MPH, DFA, PhD
Kremer, Philip - BS, PhD
Lange, Lynda - BA, MA, PhD
Matthen, Mohan - PhD, FRSC
Misak, Cheryl - BA, MA, DPhil, FRSC
Moreau, Sophia - BA, BPhil, PhD, JD
Members Emeriti

De Sousa, Ronald - BA, PhD, FRSC
Goldstick, Daniel - BA, BPhil, DPhil
Hacking, Ian - BA, MA, PhD
Stefanovic, Ingrid - BA, MA, PhD
Urquhart, Alasdair - MA, MA, PhD

Associate Members

Barnett, David - BA, PhD
de Kenessey, Brendan - PhD
Freschi, Elisa - PhD
Gelber, Jessica - PhD
Goetschel, Willi - PhD
Miller, Michael - AB, AM, PhD
Pfeiffer, Christian Tobias Georg - MPH, PhD
Schloesser, Ulrich - PhD
Swarup, Shruta - BA, MA, PhD
Tetel, Trevor - PhD, PhD

Philosophy: Philosophy MA

Master of Arts

Program Description

The MA may be taken on a full-time or part-time basis.

Applicants should consult the department's web page for complete details on graduate programs, course offerings, short academic profiles of graduate faculty, and application procedures.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Philosophy's additional admission requirements stated below.

  - Admission requires an appropriate bachelor's degree from a recognized university. Applicants must have a strong background in philosophy (roughly equivalent to an undergraduate major), with an average grade of at least a mid-B in the applicant's overall program and at least an A– in the applicant's philosophy courses.
  - Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must complete the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
    - Paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE).
    - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections.
  - Equivalent results in some other recognized test of English-language proficiency are acceptable.

Program Requirements

- **Coursework.** Students must successfully complete 3.5 full-course equivalents (FCEs) in philosophy as follows:
  - At least 1.0 FCE in the history of philosophy.
  - At least 1.0 FCE in the problems of philosophy.
  - 1.0 FCE designated courses only for MA students. One 0.5 FCE in the broad area of ethics/politics and the other 0.5 FCE in the broad area of metaphysics and epistemology. Either could be historical. The timing of the course requirement is:
    - **PHL2222H MA Proseminar I (0.5 FCE),** taken in the first session.
    - **PHL2223H MA Proseminar II (0.5 FCE),** taken in the second session.
  - **PHL3000H MA Professional Development Workshop (0.5 FCE).**
- Each MA student is assigned an advisor who will recommend a suitable program of philosophy courses. The student's choice of courses must be approved by the department.
- It is possible for a full-time student to complete all requirements for the MA degree in the Fall and Winter sessions; however, the department encourages students to take no more than 3.0 FCEs during the Fall and Winter sessions and to complete the last course during the Summer session.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 5 years part-time

Time Limit

3 years full-time; 6 years part-time
Concentration: Philosophy of Science

The Philosophy of Science concentration will provide students with a background in general philosophy of science and with specific topics in philosophy of science. Students will be prepared for academic work at the PhD level in philosophy and for non-academic career tracks that require strong critical thinking skills, as well as an understanding of science and its role in knowledge and society.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Philosophy's additional admission requirements stated below.
- Admission requires an appropriate bachelor's degree from a recognized university. Applicants must have a strong interest in:
  - Philosophy (evidenced in a strong writing sample, personal statement, and letters of reference).
  - A strong academic background in either philosophy or, typically, a subject in the natural and social sciences, with minimum average grades of A–.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must complete the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE).
  - Internet-based TOEFL exam: 100/120 and 22/30 on the writing and speaking sections.
- Equivalent results in some other recognized test of English-language proficiency are acceptable.

Program Requirements

- **Coursework.** Students must successfully complete 3.5 full-course equivalents (FCEs) including:
  - PHL2198H Advanced Introduction to the Philosophy of Science (0.5 FCE)
  - 1.5 FCE in graduate seminars in philosophy of science or cognate areas of philosophy such as logic, philosophy of language, epistemology, metaphysics, or philosophy of mind.
  - PHL3000H MA Professional Development Workshop (0.5 FCE).
- Each MA student is assigned an advisor who will recommend a suitable program of philosophy courses. The student's choice of courses must be approved by the department.
- It is possible for a full-time student to complete all requirements for the MA degree in the Fall and Winter sessions; however, the department encourages students to take no more than 3.0 FCEs during the Fall and Winter sessions and to complete the last course during the Summer session.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
5 years part-time

Time Limit

3 years full-time;
6 years part-time

Philosophy: Philosophy PhD

Doctor of Philosophy

Program Description

The PhD program has two options: a five-year option and a four-year option. The five-year option is the most common and is the only direct-entry option for students with a bachelor's degree. The five-year option provides five years of funding and requires two years of coursework, while the four-year option provides four years of funding and requires one year of coursework. The program requirements are summarized below.

Students enrolled in graduate programs in philosophy in other universities are welcome to apply to spend a year studying at the University of Toronto. Please direct any inquiries to the Director of Graduate Studies.

Students who wish to take, for credit, one or more of the courses offered by the department as non-degree students, should apply for admission as Special Students. The application procedures and deadlines are the same as those for the MA program.

Applicants should consult the department's web page for complete details on graduate programs, course offerings, short academic profiles of graduate faculty, and application procedures.

PhD Program

Minimum Admission Requirements

- Applicants approved by the department are admitted under the General Regulations of the School of Graduate Studies.
- Applicants should have a master's degree in philosophy from a recognized university with an average grade of at least an A– in the applicant's overall program. Applicants must satisfy the department that they are capable of independent research in philosophy at an advanced level.
- Applicants whose primary language is not English and who are not graduates of a university whose language of instruction is English must complete the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
Program Requirements

• Course Requirements
  o Students must complete a minimum of 3.0 FCEs in philosophy, with a minimum A– average by the end of Year 1 including:
  o At least 1.0 FCE which must comprise courses from philosophical traditions from different geographical regions and/or different historical periods.
  o At least 1.0 FCE which must comprise problems of philosophy courses.
  o The proseminar in philosophy (PHL1111H) worth 0.5 FCE during the Fall session of Year 1.
  o With the department's permission, a student may replace up to 1.0 FCE in philosophy with graduate courses offered by another department, provided that the courses are required for the student's planned research.

• Breadth Requirement. A student must demonstrate competence in at least six areas of philosophy, including the following:
  o Each of the following three areas in the problems of philosophy:
    ▪ Contemporary issues in metaphysics, epistemology, and philosophy of science.
    ▪ Contemporary issues in values (ethics, politics, aesthetics, and philosophy of religion).
    ▪ Contemporary issues in mind, language, and logic.
  o The remaining three areas must be chosen from philosophical traditions from different geographical regions such as South Asian or East Asian philosophy, and/or different historical periods such as Medieval or Twentieth-Century philosophy.
  o Competence in any area is normally established by successful completion of a graduate 0.5 FCE in that area.
  o A student must also demonstrate competence in logic (defined as proficiency in first-order symbolic logic with identity). This competence is expected of all students prior to beginning doctoral studies. Where this is not the case, competence must be acquired as a supplement to the required number of courses and be demonstrated to the satisfaction of the department by the time the qualifying requirement is met.

• Revision Paper Requirement. To be satisfied either sometime during coursework or in the summer immediately following coursework. Students will designate a particular paper typically written during coursework as their revision paper and will solicit supervision on the revision of the paper from a faculty member. Students will receive verbal and written feedback on their paper from their faculty supervisor and will revise their paper in light of this feedback. A second round of feedback and revision may be sought by the student or the faculty supervisor, after which time the student will again revise and submit. Students should plan to complete the requirement over one or two months depending on whether one or two rounds of revision are undertaken.

• Qualifying Requirement. After completing all course requirements, the student selects a thesis committee that will oversee his or her academic progress through the final thesis defence. The student meets with the committee to discuss a tentative thesis topic, construct an appropriate research reading list, and receive guidance on writing a qualifying paper. After submitting the qualifying paper and making any required adjustments to the reading list, the student takes a two-part (written and oral) qualifying examination based on the paper and the reading list. The paper will be submitted and written and oral exams taken four to six weeks later, during the Winter session of Year 2.

• Dissertation Prospectus Requirement. To be satisfied at the September meeting of the student and their dissertation committee. The prospectus can take many forms and could, for example, proceed by indicating chapters, problems, and literature, and/or theses that will organize, be discussed, or be argued for in the dissertation. Committees will then give feedback on the overall plan. The length of the prospectus will vary from committee to committee but as a rough guideline, the prospectus may comprise a document of three to five pages.

• Research Tools Requirement. Each PhD student must demonstrate competence in at least one research tool. A research tool may be one of the following:
  o Reading knowledge of a language other than English.
  o Familiarity with a discipline other than philosophy (e.g., linguistics, psychology, or mathematics).
  o Mastery of research methods not typical in philosophy (e.g., statistical methods).
  o The research tool will be determined by the Graduate Coordinator in consultation with the student's thesis committee.

• Thesis. A candidate must submit a thesis on an approved subject and defend the thesis at a Doctoral Final Oral Examination. The department is not obligated to provide supervision in areas falling outside the competency, interest, or availability of its graduate faculty.

• Residence. Students must be registered as full-time, on-campus students and must reside in sufficient geographical proximity to enable them to fulfil the course, breadth, qualifying, and language requirements set by the department in a smooth and timely fashion. They are also expected to participate fully in departmental activities. While writing the thesis, candidates are expected to be in residence, with the exception of absence for research.

• Normal Timeline Through the Program. By the end of Year 1 of registration, students should have completed all the course requirements for the degree. By the end of the following year of registration, all students should have satisfied any remaining breadth requirements, selected a thesis committee, and passed the qualifying examination. (These are general deadlines; consult the department's web page for specific dates and further details.) Thereafter, the candidate selects a member of the thesis committee to be the thesis supervisor and begins work on the thesis, which he or she is expected to finish within two years.

Program Length

4 years

Time Limit

6 years
PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants approved by the department are admitted under the General Regulations of the School of Graduate Studies.
- Applicants should have an appropriate bachelor's degree from a recognized university; a strong background in philosophy (roughly equivalent to an undergraduate major); and an average grade of at least a B+ in the overall program and at least an A– in philosophy courses.
- Applicants whose primary language is not English and who are not graduates of a university whose language of instruction is English must complete the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Paper-based TOEFL exam: 600 and 5 on the Test of Written English (TWE).
  - Internet-based TOEFL exam: 100/120 and 22/30 on the reading and speaking sections.
- Equivalent results in some other recognized test of English-language proficiency are acceptable.

Program Requirements

- **Course Requirements**
  - Students must take a minimum of 6.0 FCEs in philosophy, with an average grade of at least an A– including:
    - At least 2.0 FCEs which must comprise courses from philosophical traditions from different geographical regions such as South Asian or East Asian philosophy, and/or different historical periods such as Medieval or Twentieth-Century philosophy.
    - At least 2.0 FCEs which must comprise problems of philosophy courses.
    - The proseminar in philosophy (PHL1111H) worth 0.5 FCE during the Fall session of Year 1.
    - With the department's permission, a student may replace up to 1.0 FCE in philosophy with graduate courses offered by another department, provided that the courses are required for the student's planned research.
  - To remain in good standing, students must complete 3.0 FCEs with an A– average by the end of Year 1, and 6.0 FCEs with an A– average by the end of Year 2.
- **Breadth Requirement.** A student must demonstrate competence in at least six areas of philosophy, including the following:
  - Each of the following three areas in the problems of philosophy:
    - Contemporary issues in metaphysics, epistemology, and philosophy of science.
    - Contemporary issues in values (ethics, politics, aesthetics, and philosophy of religion).
    - Contemporary issues in mind, language, and logic.
  - The remaining three required areas must be chosen from philosophical traditions from different geographical regions such as South Asian or East Asian philosophy, and/or different historical periods such as Medieval or Twentieth-Century philosophy.
  - Competence in any area is normally established by successful completion of a graduate 0.5 FCE in that area.
- **Revision Paper Requirement.** To be satisfied either sometime during coursework or in the summer immediately following coursework. Students will designate a particular paper typically written during coursework as their revision paper and will solicit supervision on the revision of the paper from a faculty member. Students will receive verbal and written feedback on their paper from their faculty supervisor and will revise their paper in light of this feedback. A second round of feedback and revision may be sought by the student or the faculty supervisor, after which time the student will again revise and submit. Students should plan to complete the requirement over one or two months depending on whether one or two rounds of revision are undertaken.
- **Qualifying Requirement.** After completing all course requirements, the student selects a thesis committee that will oversee his or her academic progress through the final thesis defence. The student meets with the committee to discuss a tentative thesis topic, construct an appropriate research reading list, and receive guidance on writing a qualifying paper. After submitting the qualifying paper and making any required adjustments to the reading list, the student takes a two-part (written and oral) qualifying examination based on the paper and the reading list. The paper will be submitted and written and oral exams taken four to six weeks later, during the Winter session of Year 3.
- **Dissertation Prospectus Requirement.** To be satisfied at the September meeting of the student and her dissertation committee. The prospectus can take many forms and could, for example, proceed by indicating chapters, problems, and literature, and/or theses that will organize, be discussed, or be argued for in the dissertation. Committees will then give feedback on the overall plan. The length of the prospectus will vary from committee to committee but as a rough guideline, the prospectus may comprise a document of three to five pages.
- **Research Tools Requirement.** Each PhD student must demonstrate competence in at least one research tool. A research tool may be one of the following:
  - Reading knowledge of a language other than English.
  - Familiarity with a discipline other than philosophy (e.g., linguistics, psychology, or mathematics).
  - Mastery of research methods not typical in philosophy (e.g., statistical methods).
  - The research tool will be determined by the Graduate Coordinator in consultation with the student's thesis committee.
- **Thesis.** A candidate must submit a thesis on an approved subject and defend the thesis at a Doctoral Final Oral Examination. The department is not obligated to provide supervision in areas falling outside the competency, interest, or availability of its graduate faculty.
- **Residence.** Students must be registered as full-time, on-campus students and must reside in sufficient geographical proximity to enable them to fulfill the course, breadth, qualifying, and language requirements set by the department in a smooth and timely fashion. They are also expected to participate fully in departmental activities. While writing the thesis, candidates are expected to be in residence, with the exception of absence for research.
- **Normal Timeline Through the Program.** By the end of Year 2 of registration, students should have completed all course requirements for the degree. By the end of the following year of registration, all students should have satisfied any remaining breadth requirements, selected a thesis committee, and passed the qualifying examination. (These are general deadlines; consult the department's web page for specific dates and further details.) Thereafter, the candidate selects a member of the thesis committee to be the thesis supervisor and begins work on the thesis, which he or she is expected to finish within two years.

**Program Length**

- 5 years

**Time Limit**

- 7 years

**Philosophy: Philosophy MA, PhD Courses**

Not all courses are offered every year. Please consult the department's website, which lists the courses the department will offer this year as well as those offered by other departments that may be taken for philosophy credit.

**Required Courses**

- PHL1111H  PhD Proseminar
- PHL2222H  MA Proseminar I
- PHL2223H  MA Proseminar II
- PHL3000H  MA Professional Development Workshop

**Concentration: Philosophy of Science**

- PHL2198H  Advanced Introduction to the Philosophy of Science

**Reading Courses**

- PHL1000H,Y  Reading Course
- PHL1001H,Y  Reading Course
- PHL1500H,Y  Reading Course

**History of Philosophy**

- Classical Greek and Roman Philosophy
  - PHL2000H  Early Greek Philosophy

**East Asian Philosophy**

- PHL2013H  Topics in Chinese Philosophy
- PHL2014H  Topics in Chinese Moral Psychology
- PHL2015H  Confucianism
- PHL2016H  Taoism: Philosophy and Religion

**South Asian Philosophy**

- PHL2018H  South Asian Philosophy
- PHL2019H  Topics in South Asian Philosophy

**Medieval Philosophy**

- MST3301H  Themes in Medieval Philosophy
- MST3309H  Birth of the Will: Augustine and Anselm
- MST3311H  Topics in Medieval Metaphysics (PR)
- MST3322H  William of Ockham
- MST3327H  Free Will and Human Action in Medieval Philosophy
- MST3346H  Medieval Islamic Philosophy

**Early Modern Philosophy**

- PHL2051H  The Rationalists
- PHL2055H  The Empiricists
- PHL2057H  Seminar in Seventeenth-and Eighteenth-Century Philosophy
- PHL2063H  Kant's Ethics

**Feminist Philosophy**

- PHL2140H  Topics in Feminist Philosophy
### Nineteenth- and Twentieth-Century Philosophy

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>PHL2076H</td>
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<td>PHL2078H</td>
<td>Kierkegaard</td>
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<tr>
<td>PHL2079H</td>
<td>Marxist Philosophy</td>
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<tr>
<td>PHL2084H</td>
<td>Seminar in Nineteenth-Century Continental Philosophy</td>
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<tr>
<td>PHL2085H</td>
<td>Husserl</td>
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<tr>
<td>PHL2089H</td>
<td>Seminar in Twentieth-Century Continental Philosophy</td>
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<td>PHL2090H</td>
<td>Hermeneutics</td>
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<tr>
<td>PHL2091H</td>
<td>The Critical Theory of Society</td>
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<td>PHL2092H</td>
<td>Pragmatism</td>
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<td>PHL2093H</td>
<td>Frege</td>
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<td>PHL2094H</td>
<td>Russell</td>
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<td>PHL2095H</td>
<td>Wittgenstein</td>
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<td>PHL2096H</td>
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<tr>
<td>PHL2097H</td>
<td>Later Analytic Philosophy</td>
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<tr>
<td>PHL2192H</td>
<td>Seminar in Analytic Philosophy</td>
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<tr>
<td>PHL2193H</td>
<td>Topics in Analytic Philosophy</td>
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### Logic and the Philosophy of Language

<table>
<thead>
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<th>Course Code</th>
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<tr>
<td>PHL2120H</td>
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<tr>
<td>PHL2122H</td>
<td>Advanced Logic</td>
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<td>PHL2124H</td>
<td>Seminar in Logic</td>
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<tr>
<td>PHL2125H</td>
<td>Many Valued and Modal Logics</td>
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<td>PHL2126H</td>
<td>Philosophy of Logic</td>
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<tr>
<td>PHL2127H</td>
<td>Philosophy of Mathematics</td>
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<td>PHL2128H</td>
<td>Decision and Game Theory</td>
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<td>PHL2130H</td>
<td>Topics in Informal Logic</td>
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<tr>
<td>PHL2137H</td>
<td>Philosophy of Action</td>
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<td>PHL2190H</td>
<td>Philosophy of Language</td>
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<td>PHL2191H</td>
<td>Seminar in the Philosophy of Language</td>
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<tr>
<td>PHL2197H</td>
<td>Foundations of Computation and Information</td>
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### History and Philosophy of Science and Technology

For MA students in the Philosophy of Science concentration.

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>HPS2000H</td>
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<td>HPS2001H</td>
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<td>HPS2003H</td>
<td>History of Biology</td>
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<td>HPS2008H</td>
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<td>HPS2009H</td>
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### Problems of Philosophy

### Metaphysics and Epistemology

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<td>PHL2105H</td>
<td>Topics in Metaphysics</td>
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<tr>
<td>PHL2111H</td>
<td>Seminar in Epistemology</td>
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<tr>
<td>PHL2115H</td>
<td>Topics in Epistemology</td>
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<tr>
<td>PHL2117H</td>
<td>Formal Epistemology</td>
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<td>PHL2119H</td>
<td>Philosophical Foundations of Multidisciplinary Studies</td>
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### Value Theory

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<td>PHL2133H</td>
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<td>PHL2135H</td>
<td>Metaethics</td>
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<td>PHL2141H</td>
<td>Political Philosophy</td>
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<td>PHL2142H</td>
<td>Seminar in Political Philosophy</td>
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<td>PHL2143H</td>
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<td>PHL2144H</td>
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<td>PHL2146Y</td>
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<td>PHL2148H</td>
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<td>JPL2149H</td>
<td>Legal Theory</td>
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<td>PHL2151H</td>
<td>Aesthetics</td>
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<td>PHL2152H</td>
<td>Philosophy and Teaching</td>
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### Philosophy of Science

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<td>PHL2196H</td>
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<td>PHL2198H</td>
<td>Advanced Introduction to the Philosophy of Science</td>
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<td>PHL2199H</td>
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<td>PHL2200H</td>
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**Miscellaneous**

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<td>PHL4900H</td>
<td>Research Seminar</td>
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Physical and Environmental Sciences

Physical and Environmental Sciences: Introduction

Faculty Affiliation

University of Toronto Scarborough (UTSC)

Degree Programs

Environmental Science

MEnvSc

- Fields:
  - Climate Change Impacts and Adaptation;
  - Conservation and Biodiversity;
  - Terrestrial and Aquatic Systems

PhD

- Concentrations:
  - Climate Change and the Environment;
  - Contaminant Flux;
  - Environmental Science in Transitional Economies;
  - Great Lakes Ecosystems;
  - Remediation and Restoration of Degraded Environmental Systems;
  - Urban Geoscience

Combined Degree Programs

- UTSC, Conservation and Biodiversity (Specialist), HBSc / MEnvSc
- UTSC, Environmental Biology (Specialist), HBSc / MEnvSc
- UTSC, Environmental Biology (Specialist Co-op), HBSc / MEnvSc
- UTSC, Environmental Chemistry (Specialist), HBSc / MEnvSc
- UTSC, Environmental Chemistry (Specialist Co-op), HBSc / MEnvSc
- UTSC, Environmental Geoscience (Specialist), HBSc / MEnvSc
- UTSC, Environmental Geoscience (Specialist Co-op), HBSc / MEnvSc
- UTSC, Environmental Physics (Specialist), HBSc / MEnvSc
- UTSC, Environmental Physics (Specialist Co-op), HBSc / MEnvSc
- UTSC, Integrative Biology (Specialist), HBSc / MEnvSc

Collaborative Specializations

The following collaborative specializations are available to students in the participating degree programs as listed below:

- Development Policy and Power
  - Environmental Science, MEnvSc
- Environmental Studies
  - Environmental Science, MEnvSc, PhD
- Environment and Health
  - Environmental Science, MEnvSc, PhD
- Food Studies
  - Environmental Science, PhD

Overview

The Graduate Department of Physical and Environmental Sciences offers opportunities for graduate studies in environmental science, leading to the degrees of Master of Environmental Science (MEnvSc) and Doctor of Philosophy (PhD) in Environmental Science.

Contact and Address

Web: [www.utsc.utoronto.ca/gradpes](http://www.utsc.utoronto.ca/gradpes)
MEnvSc email: dpes-mesc-program@utsc.utoronto.ca
PhD email: dpes-phd-program@utsc.utoronto.ca
MEnvSc telephone: (416) 287-7205
PhD telephone: (416) 208-2910
Fax: (416) 287-7204

Graduate Department of Physical and Environmental Sciences
University of Toronto Scarborough
1265 Military Trail, EV254
Toronto, Ontario M1C 1A4
Canada

Physical and Environmental Sciences: Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Allen, Grant - BASc, MSc, PhD
Andrade, Maydianne - BSc, MS, PhD
Archontitsis, Georgios - BSc, MSc, PhD
Arya, Rivakshani - BSc, MS, PhD
Bergquist, Bridget - BS, PhD
Boonstra, Rudy - BSc, PhD
Cadotte, Marc - BS, MS, PhD
Campbell, Malcolm - DPhil
Caron-Beaudoin, Elyse - BA, MSc, PhD
Chen, Jing - BSc, PhD
Cowling, Sharon - BSc, MSc, PhD
Desloges, Joseph - BES, MSc, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria - BES, MSc, PhD
Donaldson, D. James - PhD
**Physical and Environmental Sciences: Environmental Science MEnvSc**

**Master of Environmental Science**

**Program Description**

The MEnvSc is a 12-month degree program committed to the development of well-trained practitioners in environmental science in all fields, primarily to meet the needs of industry, governments, and environmental policy/education organizations.

The MEnvSc offers three enrolment options — research, internship, and part-time studies — in each of the three fields. The three designated fields of study are:

- **Climate Change Impacts and Adaptation:** Students are trained in the science, data analysis, and rigorous assessment process for the impacts of climate change on a wide range of natural and human systems.
- **Conservation and Biodiversity:** A major focus is the application of ecological theory and principles to real-world conservation challenges.
- **Terrestrial and Aquatic Systems:** A major focus is understanding the flux of contaminants and excess nutrients through surface and sub-surface environments and the methods/solutions needed to remediate contaminated or damaged environmental systems.

In all three fields, students can opt for an internship or a research option after eight months of coursework. The Department of Physical and Environmental Sciences has the support of two dedicated internship coordinators who help students find and successfully complete an internship by providing them with professional skills training and in-class workshops on topics that include job search preparation and skills such as: environmental labour market, workplace expectations, professionalism, networking, and more. The MEnvSc program works closely with a broad employer base for internship opportunities. Research-stream MEnvSc students receive intensive and individualized academic and research support from mentors of their choice.

Full-time and part-time study options are available in all fields of study.
Field: Climate Change Impacts and Adaptation

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Physical and Environmental Sciences' additional admission requirements stated below.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- A minimum mid-B grade average in the last two years of the undergraduate program.
- Applicants must submit a written statement explaining their objectives for entering the program and the suitability of their background. Appropriate post-graduate work experiences will be considered as part of the admission application.
- A science or engineering undergraduate degree including at least two half courses or one full course in each of chemistry, physics, calculus, and biology.

Program Requirements

- **Coursework** consists of 5.5 full-course equivalents (FCEs) as follows:
  - EES1100H Advanced Seminar in Environmental Science (0.5 FCE)
  - EES1117H Climate Change Impact Assessment (0.5 FCE)
  - EES1132H Climate Data Analysis (0.5 FCE).
  - Note: students who have completed EESD21H3 as part of their undergraduate degree, and achieved a minimum grade of 70%, should replace EES1132H with another elective graduate course of the same credit weight (0.5 FCE).
  - EES1133H Climate Change Science and Modelling (0.5 FCE)
  - Completion of two of the following three courses:
    - EES1131H Applied Climatology (0.5 FCE)
      - Note: students who have completed EESD31H3 and completed A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MEnvSc student who achieves a minimum grade of 70%, cannot receive more than one final grade of FZ (i.e., two or more) will be recommended for termination of registration from the MEnvSc program.

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time

Field: Conservation and Biodiversity

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Physical and Environmental Sciences' additional admission requirements stated below.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- A minimum mid-B grade average in the last two years of the undergraduate program.
- Applicants must submit a written statement explaining their objectives for entering the program and the suitability of their background. Appropriate post-graduate work experiences will be considered as part of the admission application.
- An undergraduate degree in biology or a closely related field, and successful completion of an undergraduate course in conservation biology. Students who have not successfully completed an undergraduate course in conservation biology will be required to complete an undergraduate course, BIOC63H3 Conservation Biology (0.5 FCE), as an extra (EXT) course.

Conservation Biology will be required to complete an undergraduate course in conservation biology. Students who have not successfully completed an undergraduate course in conservation biology, and planning to complete the research paper option FCEs for the research paper (EES1101Y). Students must complete the prerequisite (EES1132H (0.5 FCE), as an extra (EXT) course.

Each student is required to have a research supervisor. For full-time students, the intensive research necessary for the research paper will normally be completed in the final Summer session. The final research paper needs to be written in scientific journal format and will be presented and defended orally in front of an examination committee. The committee will include the supervisor and two other members of the graduate faculty.

- **Internship option**: For full-time students, the internship in private industry, government, or a non-governmental organization (NGO) will normally be completed in the final Summer session. It will consist of a minimum of four consecutive months. Successful completion of the internship is based on an assessment completed by the student's work supervisor, the satisfactory completion of a written experience report, and the satisfactory completion and presentation of a poster highlighting the internship experience.
  - A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MEnvSc student who achieves a minimum grade of 70%, cannot receive more than one final grade of FZ (i.e., two or more) will be recommended for termination of registration from the MEnvSc program.

Notes:

- Students who have completed EESD31H3 or EESD32H3 as an extra (EXT) course.
- Note: students who have completed EESD31H3 or EESD32H3 as part of their undergraduate degree, and achieved a minimum grade of 70%, should replace EES1132H with another elective graduate course of the same credit weight (0.5 FCE).
- EES1133H Climate Change Science and Modelling (0.5 FCE)
- Completion of two of the following three courses:
  - EES1131H Applied Climatology (0.5 FCE)
  - Note: students who have completed EESD31H3 as part of their undergraduate degree, and achieved a minimum grade of 70%, cannot complete EES1131H as part of the MEnvSc program; they should complete EES1134H and EES1136H.
  - EES1134H Climate Change Policy (0.5 FCE)
  - EES1136H Climate Change Adaptation (0.5 FCE)
  - Completion of either:
    - 0.5 FCE in elective courses (see course list) and 2.0 FCEs for the internship (EES1116Y), or
    - 1.0 FCE in elective courses (see course list) and 1.5 FCEs for the research paper (EES1101Y). Students planning to complete the research paper option must complete the prerequisite (EES1114H).
  - Students will choose either a research or internship option.
  - **Research option**: Each student is required to have a research supervisor. For full-time students, the intensive research necessary for the research paper will normally be completed in the final Summer session. The final research paper needs to be written in scientific journal format and will be presented and defended orally in front of an examination committee. The committee will include the supervisor and two other members of the graduate faculty.
  - Internship option: For full-time students, the internship in private industry, government, or a non-governmental organization (NGO) will normally be completed in the final Summer session. It will consist of a minimum of four consecutive months. Successful completion of the internship is based on an assessment completed by the student's work supervisor, the satisfactory completion of a written experience report, and the satisfactory completion and presentation of a poster highlighting the internship experience.
  - A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MEnvSc student who achieves a minimum grade of 70%, cannot receive more than one final grade of FZ (i.e., two or more) will be recommended for termination of registration from the MEnvSc program.

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time
Program Requirements

- **Coursework** consists of 5.5 full-course equivalents (FCEs) as follows:
  - EES1100H Advanced Seminar in Environmental Science (0.5 FCE)
  - EES3000H Applied Conservation Biology (0.5 FCE)
  - EES3001H Professional Scientific Literacy (0.5 FCE)
  - EES3002H Conservation Policy (0.5 FCE)
  - EES3003H Topics in Applied Biodiversity (0.5 FCE)
  - Completion of either:
    - 1.0 FCE in elective courses (see the course list) and 2.0 FCEs for the internship (EES1116Y) or
    - 1.5 FCEs in elective courses (see the course list) and 1.5 FCEs for the research paper (EES1101Y).
- Students will choose either a research or internship option.
  - **Research option:** Each student is required to have a research supervisor. For full-time students, the intensive research necessary for the research paper will normally be completed in the final Summer session. The final research paper needs to be written in scientific journal format and will be presented and defended orally in front of an examination committee. The committee will include the supervisor and two other members of the graduate faculty.
  - **Internship option:** For full-time students, the internship in private industry, government, or a non-governmental organization (NGO) will normally be completed in the final Summer session. It will consist of a minimum of four consecutive months. Successful completion of the internship is based on an assessment completed by the student's work supervisor, the satisfactory completion of a written experience report, and the satisfactory completion and presentation of a poster highlighting the internship experience.
- A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MEnvSc student who receives more than one final grade of FZ (i.e., two or more) will be recommended for termination of registration from the MEnvSc program.

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time

Field: Terrestrial and Aquatic Systems

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Physical and Environmental Sciences' additional admission requirements stated below.

- Applicants whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.
- A minimum mid-B grade average in the last two years of the undergraduate program.
- Applicants must submit a written statement explaining their objectives for entering the program and the suitability of their background. Appropriate post-graduate work experiences will be considered as part of the admission application.
- A science or engineering undergraduate degree including at least two half courses or one full course in each of chemistry, physics, calculus, and biology.

Program Requirements

- **Coursework** consists of 5.5 full-course equivalents (FCEs) as follows:
  - EES1100H Advanced Seminar in Environmental Science (0.5 FCE)
  - Complete either:
    - 3.0 FCEs in elective courses (see the course list) and 2.0 FCEs for the internship (EES1116Y) or
    - 3.5 FCEs in elective courses (see the course list) and 1.5 FCEs for the research paper (EES1101Y).
  - Students planning to complete the research paper option must complete the prerequisite EES1114H.
  - Students will choose either a research or internship option.
    - **Research option:** Each student is required to have a research supervisor. For full-time students, the intensive research necessary for the research paper will normally be completed in the final Summer session. The final research paper needs to be written in scientific journal format and will be presented and defended orally in front of an examination committee. The committee will include the supervisor and two other members of the graduate faculty.
    - **Internship option:** For full-time students, the internship in private industry, government, or a non-governmental organization (NGO) will normally be completed in the final Summer session. It will consist of a minimum of four consecutive months. Successful completion of the internship is based on an assessment completed by the student's work supervisor, the satisfactory completion of a written experience report, and the satisfactory completion and presentation of a poster highlighting the internship experience.
- A final grade below 70% in any course equates to an FZ, which is an insufficient grade. A MEnvSc student who receives more than one final grade of FZ (i.e., two or more) will be recommended for termination of registration from the MEnvSc program.

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time
Physical and Environmental Sciences: Environmental Science MEnvSc Courses

Please note that not all courses are offered every year.

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<td>EES1101Y</td>
<td>Research Paper in Environmental Science</td>
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<td>EES1102H</td>
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<td>EES1103H</td>
<td>Field Measurements and Sampling: The Essentials</td>
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<td>EES1104H</td>
<td>Microorganisms and the Environment</td>
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<td>EES1105H</td>
<td>Soil Contamination Chemistry</td>
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<td>EES1106H</td>
<td>Geological Evolution and Environmental History of North America</td>
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<td>EES1108H</td>
<td>Environmental Science Field Camp</td>
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<td>EES1109H</td>
<td>Advanced Techniques in Geographic Information Systems</td>
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<td>EES1111H</td>
<td>Freshwater Ecology and Biomonitoring</td>
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<td>Boundary Layer Climates and Contaminant Fate</td>
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<td>EES1113H</td>
<td>Groundwater Hydrochemistry and Contaminant Transport</td>
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<td>EES1114H</td>
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<td>EES1115H</td>
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<td>Climate Change Impact Assessment</td>
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<td>EES1118H</td>
<td>Fundamentals of Ecological Modelling</td>
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<td>Modelling the Fate of Organic Chemicals in the Environment</td>
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<td>Global Environmental Security and Sustainable Development</td>
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<td>EES1123H</td>
<td>Environmental Regulations</td>
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<td>EES1124H</td>
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<td>EES1125H</td>
<td>Contaminated Site Remediation</td>
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<td>EES1126H</td>
<td>Hydrology and Watershed Management</td>
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<td>EES1127H</td>
<td>Applied Biogeochemistry and Geomicrobiology</td>
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<td>EES1128H</td>
<td>Biophysical Interactions in Managed Environments</td>
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<td>EES1129H</td>
<td>Brownfields Redevelopment</td>
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<td>EES1130H</td>
<td>Ontario BioGeospheres Field Course</td>
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<td>EES1134H</td>
<td>Climate Change Policy</td>
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<td>Environmental Change and Human Health</td>
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<td>EES1136H</td>
<td>Climate Change Adaptation</td>
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<td>Quantitative Applications for Data Analysis</td>
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<td>Environmental Risk Assessment</td>
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<tr>
<td>EES3002H</td>
<td>Conservation Policy</td>
</tr>
<tr>
<td>EES3003H</td>
<td>Topics in Applied Biodiversity</td>
</tr>
<tr>
<td>EES3111H</td>
<td>Conservation Genetics</td>
</tr>
<tr>
<td>EES3113H</td>
<td>Topics in Population and Community Ecology</td>
</tr>
<tr>
<td>EES3114H</td>
<td>Topics in Urban and Rural Ecology</td>
</tr>
<tr>
<td>EES4001H</td>
<td>Internship Training 1 (restricted to students enrolled in one of the approved combined degree programs with the MEnvSc)</td>
</tr>
<tr>
<td>EES4003H</td>
<td>Academic Training 1 (restricted to students enrolled in one of the approved combined degree programs with the MEnvSc)</td>
</tr>
</tbody>
</table>

Physical and Environmental Sciences: Environmental Science PhD

Doctor of Philosophy

Program Description

Research and teaching are focused on the interfaces between traditional disciplines in dealing with fundamental scientific issues. Faculty members are cross-appointed from several departments including: chemistry, earth sciences, geography, ecology and evolutionary biology, cell and systems biology, engineering, forestry, physics, and social sciences. Research is clustered into six major concentrations:

- Climate Change and the Environment
- Contaminant Flux
- Environmental Science in Transitional Economies
- Great Lakes Ecosystems
- Remediation and Restoration of Degraded Environmental Systems
- Urban Geoscience
Applicants may be accepted into the PhD program via one of three routes: 1) following completion of an appropriate master’s degree; 2) transfer from an appropriate master’s program; or 3) direct entry following completion of an appropriate BSc degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Physical and Environmental Sciences’ additional admission requirements stated below.
- Applicants may be accepted into the PhD program:
  - Following completion of the MEnvSc degree, an MSc degree in environmental science, or a related discipline, or the MASc degree in environmental engineering or related discipline, or equivalent from a recognized university with a minimum of B+ average in all work completed in the master's program.
  - By requesting transfer from a suitable master's program (see above); students may reclassify from the master's program after 12 months of full-time study. Transfer from the MEnvSc program is not permitted.

Program Requirements

- **Coursework.** A total of 2.0 full-course equivalents (FCEs) as follows:
  - A mandatory 0.5 FCE (EES2200H Advanced Seminar in Environmental Science) plus 1.5 FCEs to provide background for the student's research. Courses selected must be approved by the student’s supervisor and the Graduate Chair. In some cases, additional courses may be required if a student's preparedness is assessed as being insufficient.
  - Students may apply to take a number of PhD-level courses taught by the core faculty, both within the Graduate Department of Physical and Environmental Sciences and outside the Graduate Department of Physical and Environmental Sciences as part of their 1.5 FCEs for the degree. However, all courses for the PhD degree must be approved by the student's supervisor and the Graduate Chair.
- **Thesis.** The execution of an original piece of research in environmental science carried out under faculty supervision and presented in thesis form. The program requires the development and submission of a thesis proposal, and its examination in an oral thesis proposal appraisal (before the end of Year 2), a departmental oral examination of the completed thesis, and a Doctoral Final Oral Examination (FOE) carried out under the auspices of the School of Graduate Studies (SGS) involving examination by an appropriate at-arms-length external examiner.
  - The PhD proposal appraisal consists of a 20-minute presentation given by the student on the proposed thesis work followed by a question period where the student is examined on their proposal and their mastery of concepts in environmental science. The emphasis will be on the theory and proposed approach, rather than on progress to date. A negative outcome requires that the student retake the exam within four months after incorporating recommendations from the committee for improving the thesis research proposal. The outcome of the second exam will be either a pass or withdrawal from the program.
  - The Graduate Department of Physical and Environmental Sciences’ PhD program requires that all PhD candidates complete two thesis defences: a Departmental Thesis Defence and an FOE with SGS. Normally, the Departmental Thesis Defence will be held at least eight weeks prior to the FOE. The committee will notify the Graduate Chair that the thesis is ready to be forwarded to SGS for the FOE. If the PhD candidate does not pass the Departmental Thesis Defence, the committee may recommend that the PhD candidate postpone their FOE.

Program Length

- 4 years full-time; 5 years transfer-from-master’s

Time Limit

- 6 years full-time; 7 years transfer-from-master’s

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Graduate Department of Physical and Environmental Sciences’ additional admission requirements stated below.
- In the case of exceptional students, applicants may be accepted into the PhD program by direct entry; that is, after completing an honours BSc degree in a related discipline with a minimum University of Toronto average of A– or equivalent.

Program Requirements

- **Coursework.** A total of 3.0 full-course equivalents (FCEs) as follows:
  - A mandatory 0.5 FCE (EES2200H Advanced Seminar in Environmental Science) plus 2.5 FCEs to provide background for the student's research. Courses selected must be approved by the student’s supervisor and the Graduate Chair. In some cases, additional courses may be required if a student's preparedness is assessed as being insufficient.
  - Students may apply to take a number of PhD-level courses taught by the core faculty, both within the Graduate Department of Physical and Environmental Sciences and outside the Graduate Department of Physical and Environmental Sciences as part of their 2.5 FCEs for the degree. However, all courses for the PhD degree must be approved by the student's supervisor and the Graduate Chair.
Thesis. The execution of an original piece of research in environmental science carried out under faculty supervision and presented in thesis form. The program requires the development and submission of a thesis proposal, and its examination in an oral thesis proposal appraisal (before the end of Year 2), a departmental oral examination of the completed thesis, and a Doctoral Final Oral Examination (FOE) carried out under the auspices of the School of Graduate Studies (SGS) involving examination by an appropriate at-arms-length external examiner.

The PhD proposal appraisal consists of a 20-minute presentation given by the student on the proposed thesis work followed by a question period where the student is examined on their proposal and their mastery of concepts in environmental science. The emphasis will be on the theory and proposed approach, rather than on progress to date. A negative outcome requires that the student retake the exam within four months after incorporating recommendations from the committee for improving the thesis research proposal. The outcome of the second exam will be either a pass or withdrawal from the program.

The Graduate Department of Physical and Environmental Sciences’ PhD program requires that all PhD candidates complete two thesis defences: a Departmental Thesis Defence and an FOE with SGS. Normally, the Departmental Thesis Defence will be held at least eight weeks prior to the FOE. The committee will notify the Graduate Chair that the thesis is ready to be forwarded to SGS for the FOE. If the PhD candidate does not pass the Departmental Thesis Defence, the committee may recommend that the PhD candidate postpone their FOE.

Program Length
5 years full-time

Time Limit
7 years full-time

Physical and Environmental Sciences: Environmental Science PhD Courses

Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES2200H</td>
<td>Advanced Seminar in Environmental Science</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES1102H</td>
<td>Analytical Chemistry for Geoscientists</td>
</tr>
</tbody>
</table>

The following are courses offered within the Department of Physical and Environmental Sciences. With the approval of the Graduate Chair, relevant courses from other graduate departments can be applied to the required full-course equivalents. Not all courses are offered every year.

EES1103H | Field Measurements and Sampling: The Essentials
EES1104H | Microorganisms and the Environment
EES1105H | Soil Contamination Chemistry
EES1106H | Geological Evolution and Environmental History of North America
EES1109H | Advanced Techniques in Geographic Information Systems
EES1111H | Freshwater Ecology and Biomonitoring
EES1112H | Boundary Layer Climates and Contaminant Fate
EES1113H | Groundwater Hydrochemistry and Contaminant Transport
EES1117H | Climate Change Impact Assessment
EES1118H | Fundamentals of Ecological Modelling
EES1119H | Quantitative Environmental Analysis
EES1120H | Fluid Dynamics of Contaminant Transport
EES1121H | Modeling the Fate of Organic Chemicals in the Environment
EES1122H | Global Environmental Security and Sustainable Development
EES1126H | Hydrology and Watershed Management
EES1127H | Applied Biogeochemistry and Geomicrobiology
EES1128H | Biophysical Interactions in Managed Environments
EES1131H | Applied Climatology (exclusion: EESD31H3)
EES1132H | Climate Data Analysis (exclusion: EESD21H3)
EES1133H | Climate Change Science and Modelling
EES1134H | Climate Change Policy
EES1135H | Environmental Change and Human Health
EES1136H | Climate Change Adaptation
EES1137H | Quantitative Applications for Data Analysis
EES2201H | Advanced Readings in Environmental Science
EES3000H | Applied Conservation Biology
EES3001H | Professional Scientific Literacy
EES3002H | Conservation Policy
EES3003H | Topics in Applied Biodiversity
EES3111H | Conservation Genetics
EES3113H | Topics in Population and Community Ecology
EES3114H | Topics in Urban and Rural Ecology
Physical Therapy

Physical Therapy: Introduction

Faculty Affiliation

Medicine

Degree Programs

Physical Therapy

MScPT

Overview

The Department of Physical Therapy is committed to educating future and current physical therapists, advancing practice, fostering leadership, and contributing to our communities. Graduates from the Master of Science in Physical Therapy (MScPT) program are improving the health of individuals through the discovery, application, and exchange of knowledge.

Contact and Address

Web: www.physicaltherapy.utoronto.ca
Email: physther.facmed@utoronto.ca
Telephone: (416) 946-8641
Fax: (416) 946-8562

Department of Physical Therapy
University of Toronto
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Physical Therapy: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Brooks, Dina - BSc(PT), MSc, PhD
Gibson, Barbara - MSc, BMR(PT), PhD
Jaglal, Susan - BSc, MSc, PhD (Chair and Graduate Chair)
Mathur, Sunita - BSc(PT), MSc(PT), PhD
Musselman, Kristin - MSc(PT), PhD
Nixon, Stephanie - BHSc(PT), BA, MSc, PhD
O’Brien, Kelly - BSc(PT), BS, PhD
Patterson, Kara - BSc, BPT, MSc, PhD
Reid, Darlene - BMR(PT), PhD
Salbach, Nancy - BSc(PT), BS, MSc, PhD
Yoshida, Karen - BSc, BPHE, MSc, PhD
Zabjek, Karl - BSc, MCISc, PhD

Members Emeriti

Berg, Katherine - BPT, BSc(PT), MSc, PhD
Cott, Cheryl - DipP, BPT, MSc, PhD
Verrier, Molly - DipOT, MHSc

Associate Members

Hunter, Judith - BPT, MSc, PhD
Mori, Brenda - BSc(PT), MSc, PhD
Shaw, James - BHK, MSc(PT), PhD
Switzer-McIntyre, Sharon - BSc, BPHE, MEd, PhD
Yeung, Euson - BSc(PT), MEd, PhD

Physical Therapy: Physical Therapy MScPT

Master of Science in Physical Therapy

Program Description

24-Month Option

The MScPT is a 24-month professional program leading to entry to practice. The program is accredited by Physiotherapy Education Accreditation Canada (PEAC) and more information about accreditation is available on the Department of Physical Therapy’s website. Graduates will be eligible to write the Physiotherapy Competency Examination (PCE), administered by the Canadian Alliance of Physiotherapy Regulators, which qualifies them to practise physical therapy in Canada. Graduates will be eligible to register in the Canadian Physiotherapy Association and the Colleges of Physiotherapy in all Canadian provinces.

12-Month Option

Admissions to the 12-month advanced-standing option have been administratively suspended.

The Master of Science in Physical Therapy, Advanced-Standing Option allows eligible physical therapists with a bachelor’s degree in physiotherapy to acquire the master’s degree in an online environment with on-campus residency. There is a strong focus on research and best practices integrated throughout the program.

MScPT Program (24-Month Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physical Therapy's additional admission requirements stated below.
• Applicants are considered if they hold an appropriate bachelor's degree with high academic standing from a recognized university, with a minimum mid-B average in the final year.

• Prerequisite courses include human vertebrate physiology (0.5 full-course equivalent [FCE]); human anatomy (0.5 FCE); life and/or physical sciences (1.0 FCE); social sciences, and/or humanities, and/or languages (1.0 FCE); and statistics or research methods (0.5 FCE). A minimum grade of B– (or 70%) in each of these courses, as per the grade recorded on the transcript, is required.

• Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The department prefers the Test of English as a Foreign Language (TOEFL):
  - Paper-based test: a minimum score of 600, with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)
  - Internet-based test: a minimum score of 100/120 overall, and 22/30 on the writing and speaking sections.

• Applicants must request that results be sent to institution code 0982.

• Results are due by March 1 of the application year.

• Complete a mandatory, 90-minute computer-based situational judgment test (CASPer) to assist with the selection process. CASPer assesses for non-cognitive skills and interpersonal characteristics that are important for successful students and graduates of the program.

• The CASPer z-score will be used as the initial screening process. Applicants must score ≥ -1 in order to proceed to the next stage of the admission cycle. Please refer to the Physical Therapy website for details on how the results are used in the admission process.

• Applicants apply online using the Ontario Rehabilitation Sciences Programs Application Service (ORPAS). Visit the Physical Therapy and the ORPAS websites for more information regarding application requirements and document submissions.

Program Requirements

• **Coursework.** Students must complete 18.75 full-course equivalents (FCEs) over two years of continuous, full-time study.

  - Included within the program structure are 30 weeks of full-time clinical internships.

  - Students are required to complete all courses included in the required course list below.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years

MScPT Program (12-Month Advanced-Standing Option)

Admissions have been administratively suspended.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physical Therapy's additional admission requirements stated below.

• Applicants who are eligible physical therapists will be considered if they have completed an appropriate bachelor's degree in physiotherapy with a minimum mid-B average in the final year.

• Applicants must have successfully completed the national Canadian Physiotherapy Competency Examination (with the exception of individuals licensed to practise in Quebec) and be licensed for independent practice in Canada with a provincial regulating body.

• Proficiency in the English language must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. The department prefers the Test of English as a Foreign Language (TOEFL):

  - Paper-based test: a minimum score of 600, with 5 on the Test of Written English (TWE) and 50 on the Test of Spoken English (TSE)

  - Internet-based test: a minimum score of 100/120 overall, and 22/30 on the writing and speaking sections.

• Applicants apply using the SGS Online Admissions Application system. Visit the Physical Therapy website for more information on application requirements and document submissions.

Program Requirements

• Students must complete this program option in an online environment with mandatory on-campus residency requirements.

• Students must attend unit 6 PHT1006Y (0.75 FCE) and unit 12 PHT1012Y (1.0 FCE) in on-campus residency periods.

• Students must complete unit 10 PHT1010Y, a group research project, via online format (0.75 FCE).

• Students must complete PHT1016H Evidence Based Practice in Physical Therapy (0.5 FCE).

• Complete an elective course (0.5 FCE) either online or on campus.

• For information on units of instruction, please visit the Physical Therapy website.

• Students must complete the program option in an online environment. In addition, there are two mandatory on-campus residencies, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

3 sessions (typical registration sequence: F/W/S)
**Time Limit**

3 years

**Physical Therapy: Physical Therapy MScPT**

**Courses**

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>PHT1101H</td>
<td>Critical Foundations of Physical Therapy</td>
</tr>
<tr>
<td>PHT1102Y</td>
<td>Physical Therapy Practice I</td>
</tr>
<tr>
<td>PHT1103Y</td>
<td>Physical Therapy Practice II</td>
</tr>
<tr>
<td>PHT1104Y+</td>
<td>Physical Therapy Practice III</td>
</tr>
<tr>
<td>PHT1105Y</td>
<td>Clinical Internship I (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>PHT1106H</td>
<td>Advanced Critical Thinking in Physical Therapy</td>
</tr>
<tr>
<td>PHT1107H</td>
<td>Scholarly Practice I</td>
</tr>
<tr>
<td>PHT1108Y</td>
<td>Clinical Internship II (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>PHT1109Y</td>
<td>Clinical Internship III (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>PHT1110Y</td>
<td>Physical Therapy Practice IV</td>
</tr>
<tr>
<td>PHT1111H</td>
<td>Selected Topics in Physical Therapy</td>
</tr>
<tr>
<td>PHT1112Y</td>
<td>Clinical Internship IV (Honours/Pass/Fail)</td>
</tr>
<tr>
<td>PHT1113Y</td>
<td>Scholarly Practice II</td>
</tr>
<tr>
<td>PHT1114Y</td>
<td>Clinical Internship V (Honours/Pass/Fail)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Physics

Physics: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Physics

MSc and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Biomedical Engineering
  - Physics, MSc, PhD
- Environmental Studies
  - Physics, MSc, PhD

Overview

The Department of Physics carries out research in experimental and theoretical physics in the following fields: earth, atmospheric, and planetary physics; quantum optics; condensed matter physics; subatomic physics and astrophysics; and biological physics. The department is involved in many collaborative efforts and has close ties to many institutes worldwide. Eight of them have a particular impact on students. Not only are they concerned with interdisciplinary work, but they are based, in whole or in part, at the University of Toronto and provide novel research opportunities for students at their "home base." They include: CGCS (Centre for Global Change Science), CIFAR (Canadian Institute for Advanced Research), IPP (Institute for Particle Physics), CITA (Canadian Institute for Theoretical Astrophysics), CQIQC (Center for Quantum Information and Quantum Control), the Fields Institute for Research in Mathematical Sciences, IBBME (Institute of Biomaterials and Biomedical Engineering), and PRO (Photonics Research Ontario).

Contact and Address

Web: www.physics.utoronto.ca
Email: grad@physics.utoronto.ca
Telephone: (416) 978-2945
Fax: (416) 978-1547

Department of Physics
University of Toronto
Room 315, McLennan Physical Labs
Toronto, Ontario M5S 1A7
Canada

Physics: Graduate Faculty

Full Members

Abbatt, Jonathan - BSc, PhD
Bailey, David - BSc, PhD
Barzda, Virginijus - BSc, DSc
Bond, J. Richard - BSc, MS, PhD, FRSC, FRS
Curtin, David - BSc, MSc, PhD
Dhirani, Al-Amin - MSc, PhD
Diamond, Miriam - BSc, MSc, PhD
Donaldson, D. James - PhD
Goyal, Sidhartha - MS, PhD
Gradinaru, Claudiu - PhD
Grisouard, Nicolas - BSc, MS, PhD
Hilfinger, Andreas - MA, MSc, PhD
Holdom, Bob - BSc, MA, PhD
Hong, Ziqing - PhD
Ilic, Nikolina - BSc, PhD
James, Daniel - BA, PhD
John, Sajeev - PhD
Jones, Dylan - AB, SM, PhD
Julian, Stephen - BSc, MS, PhD
Kee, Hae-Young - PhD
Kim, Yong Baek - PhD
Kim, Young-June - BS, PhD
Krieger, Peter - PhD
Kushner, Paul - BSc, MSc, PhD
Liu, Qinya - PhD
Lo, Hoi-Kwong - BA, MA, MS, PhD
Lowman, Julian - BSc, MS, DPhil
Luk, Michael - BSc, PhD
Marjoribanks, Robin - BSc, MS, MSc, PhD
McMillen, David - BSc, MS, PhD
Menou, Kristen - BSc, MS, ScD
Miller, R.J. Dwayne - BSc, MS, PhD
Milstein, Josh - BS, PhD
Moore, G.W.K. - BSc, PhD
Morris, Stephen - BSc, MSc, PhD
Murray, Norman - BSc, PhD, CRC
Netterfield, C. Barth - BSc, PhD
Or, Robert - BSc, PhD, ARCS
Paramekanti, Arun - BE, PhD
Peet, A.W. - PhD
Peltier, W. Richard - BSc, MSc, PhD
Pen, Ue-Li - BSc, PhD
Pfeiffer, Harald - MSc, PhD, CRC
Poppitz, Erich - PhD
Pysklywec, Russell - BSc, MSc, PhD
Rauscher, Sarah - BSc, PhD
Rein, Hanno - MS, DPhil
Ryu, William - AB, PhD
Savard, Pierre - PhD
Scaffidi, Thomas - BS, BE, PhD
Segal, Dvira - BSc, DSc
Sinervo, Pekka - BSc, PhD
Sipe, John - BSc, MSc, PhD
Steinberg, Aephraim - BS, MA, PhD
Strong, Kimberly - PhD (Chair and Graduate Chair)
Su, Zhan - PhD
Teuscher, Richard - BSc, MSc, PhD
Thompson, Christopher - BSc, PhD
Thywissen, Joseph - AM, PhD (Associate Chair, Graduate Studies)
Trischuk, William - PhD
Valencia, Diana - BS, MS, ScD
Vanderlinde, Keith - PhD
Physics: Physics MSc
Master of Science
Program Description
The MSc program is directed primarily to qualified students seeking a career in scientific research, with an emphasis on doctoral-stream studies. The MSc can be taken both with or without a thesis, the latter being the norm.

Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physics' additional admission requirements stated below.
- An appropriate bachelor's degree with a final-year average equivalent to at least a University of Toronto mid-B.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements
- Students normally complete program requirements in one of three ways:
  - **Option 1: Coursework plus MSc Research Report:**
    - graduate lecture courses (3.0 full-course equivalents [FCEs]);
    - a Research Report, which consists of a 6000-series research course appropriate to the field of physics (1.0 FCE) and PHY3400Y (1.0 FCE).
  - **Option 2: Coursework plus MSc Research Project:**
    - graduate lecture courses (2.0 FCEs);
  - **Option 3: Coursework plus MSc Research Thesis:**
    - a 6000-series research course appropriate to the field of physics (1.0 FCE);
    - a Research Project, which consists of a 7000-series seminar course appropriate to the field of physics (1.0 FCE) and PHY3400Y (1.0 FCE).

Program Length
3 sessions full-time (typical registration sequence: F/W/S)

Time Limit
3 years full-time

Physics: Physics PhD
Doctor of Philosophy
Program Description
The Department of Physics offers excellent quality and breadth of research fields. Its internationally leading research teams, in both theory and experiment, operate across a broad spectrum of topics as well as collaborative specializations in interdisciplinary subjects. Graduates work in government, industry, and education around the world.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree; 2) direct entry after completing a bachelor’s degree.

PhD Program
Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physics' additional admission requirements stated below.
- An appropriate University of Toronto master's degree with an average of at least B+ or demonstrated comparable research competence.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

• The core of the PhD program is an original investigation, the results of which are embodied in a thesis. Lecture courses constitute a subsidiary but important part of the program. Consult the department for details.

• Complete 3.0 full-course equivalents (FCEs): graduate lecture courses and a thesis. Course credit will normally be given towards the PhD for all graduate lecture courses taken during a master’s program in this department. Students who have completed an appropriate MSc elsewhere and are entering the PhD program will generally be given a course credit of up to 2.0 FCEs in graduate lecture courses towards their PhD course requirement.

• Complete a qualifying oral examination. Students must complete the qualifying examination within eight months. Students who fail at the first attempt have the opportunity to take the examination again within a time period specified by the examination committee.

• Students are expected to attend the weekly general colloquium conducted by the department.

Program Length

5 years

Time Limit

7 years

Physics: Physics MSc, PhD Courses

All courses are not given every year. Please check the departmental brochure or website for course availability.

Introductory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY1460H</td>
<td>Nonlinear Physics</td>
</tr>
<tr>
<td>PHY1483H</td>
<td>Relativity Theory I</td>
</tr>
<tr>
<td>PHY1484H</td>
<td>Relativity Theory II</td>
</tr>
<tr>
<td>PHY1485H</td>
<td>Laser Physics</td>
</tr>
<tr>
<td>PHY1487H</td>
<td>Quantum Theory of Solids I</td>
</tr>
<tr>
<td>PHY1489H</td>
<td>Introduction to High Energy Physics</td>
</tr>
<tr>
<td>PHY1491H</td>
<td>Current Interpretations of Quantum Mechanics</td>
</tr>
<tr>
<td>PHY1492H</td>
<td>Physics of the Earth</td>
</tr>
<tr>
<td>PHY1498H</td>
<td>Introduction to Atmospheric Physics</td>
</tr>
</tbody>
</table>

General Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY1500H</td>
<td>Statistical Mechanics</td>
</tr>
<tr>
<td>PHY1510H</td>
<td>Electromagnetism</td>
</tr>
<tr>
<td>PHY1520H</td>
<td>Quantum Mechanics</td>
</tr>
<tr>
<td>PHY1530H</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>PHY1540H</td>
<td>Mathematical Methods in Physics</td>
</tr>
<tr>
<td>PHY1600H</td>
<td>Effective Communication for Physicists</td>
</tr>
<tr>
<td>PHY1610H</td>
<td>Scientific Computing for Physicists</td>
</tr>
</tbody>
</table>

PhD Program (Direct-Entry)

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physics’ additional admission requirements stated below.

• Outstanding applicants may be considered directly from undergraduate programs. Normally, these applicants will have an undergraduate average of A or higher.

• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

• The core of the PhD program is an original investigation, the results of which are embodied in a thesis. Lecture courses constitute a subsidiary but important part of the program. Consult the department for details.
### Specialized Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY2108H</td>
<td>Special Topics in Physics I</td>
</tr>
<tr>
<td>(0.25 FCE)</td>
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<tr>
<td>PHY2109H</td>
<td>Special Topics in Physics II</td>
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<tr>
<td>(0.25 FCE)</td>
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<tr>
<td>PHY2202H</td>
<td>Atomic and Molecular Physics</td>
</tr>
<tr>
<td>PHY2203H</td>
<td>Quantum Optics I</td>
</tr>
<tr>
<td>PHY2204H</td>
<td>Quantum Optics II</td>
</tr>
<tr>
<td>PHY2205H</td>
<td>Special Topics in Quantum Optics I</td>
</tr>
<tr>
<td>PHY2206H</td>
<td>Special Topics in Quantum Optics II</td>
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<tr>
<td>PHY2208H</td>
<td>Nonlinear Optics</td>
</tr>
<tr>
<td>PHY2211H</td>
<td>Quantum Information Theory</td>
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<tr>
<td>PHY2212H</td>
<td>Entanglement Physics</td>
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<tr>
<td>PHY2303H</td>
<td>Quantum Theory of Solids II</td>
</tr>
<tr>
<td>PHY2313H</td>
<td>Special Topics in Condensed Matter Physics I</td>
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<td>PHY2314H</td>
<td>Special Topics in Condensed Matter Physics II</td>
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<tr>
<td>PHY2315H</td>
<td>Advanced Statistical Mechanics</td>
</tr>
<tr>
<td>PHY2321H</td>
<td>Many Body Physics I</td>
</tr>
<tr>
<td>PHY2322H</td>
<td>Many Body Physics II</td>
</tr>
<tr>
<td>PHY2403H</td>
<td>Quantum Field Theory I</td>
</tr>
<tr>
<td>PHY2404H</td>
<td>Quantum Field Theory II</td>
</tr>
<tr>
<td>PHY2405H</td>
<td>Experimental High Energy Physics</td>
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<tr>
<td>PHY2406H</td>
<td>Special Topics in Particle Physics I</td>
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<tr>
<td>PHY2407H</td>
<td>Special Topics in Particle Physics II</td>
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<tr>
<td>PHY2408H</td>
<td>Phenomenology of the Standard Model</td>
</tr>
<tr>
<td>PHY2502H</td>
<td>Climate System Dynamics</td>
</tr>
<tr>
<td>PHY2504H</td>
<td>Advanced Atmospheric Dynamics</td>
</tr>
<tr>
<td>PHY2505H</td>
<td>Atmospheric Radiative Transfer and Remote Sounding</td>
</tr>
<tr>
<td>PHY2506H</td>
<td>Data Assimilation and Retrieval Theory</td>
</tr>
<tr>
<td>PHY2509H</td>
<td>Special Topics in Atmospheric Physics I</td>
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<tr>
<td>PHY2510H</td>
<td>Special Topics in Atmospheric Physics II</td>
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<tr>
<td>PHY2603H</td>
<td>Inverse Theory</td>
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<td>PHY2609H</td>
<td>Planetary Physics</td>
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<td>PHY2706H</td>
<td>Special Topics in Biological Physics</td>
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<tr>
<td>PHY2707H</td>
<td>Cellular and Molecular Biophysics I</td>
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<tr>
<td>PHY2708H</td>
<td>Cellular and Molecular Biophysics II</td>
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<tr>
<td>PHY2709H</td>
<td>Quantitative Biology of Systems, Organisms, and Populations</td>
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<tr>
<td>JGP4170H</td>
<td>Geotectonics</td>
</tr>
<tr>
<td>JPE2605H</td>
<td>Advanced Seismology</td>
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### Report Course for MSc Students

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PHY3400Y*</td>
<td>Selected Topics in Physics</td>
</tr>
</tbody>
</table>

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

### Seminar Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY7001Y*</td>
<td>Atmospheric Physics Seminar</td>
</tr>
<tr>
<td>PHY7002Y*</td>
<td>Biophysics Seminar</td>
</tr>
<tr>
<td>PHY7003Y*</td>
<td>Condensed Matter Physics Seminar</td>
</tr>
<tr>
<td>PHY7004Y*</td>
<td>Geophysics Seminar</td>
</tr>
<tr>
<td>PHY7005Y*</td>
<td>Quantum Optics Seminar</td>
</tr>
<tr>
<td>PHY7007Y*</td>
<td>Subatomic Physics and Astrophysics Seminar</td>
</tr>
</tbody>
</table>

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

### Research Courses

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>PHY6011Y</td>
<td>Research in Atmospheric Physics</td>
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<tr>
<td>PHY6021Y</td>
<td>Research in Biophysics</td>
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<tr>
<td>PHY6031Y</td>
<td>Research in Condensed Matter Physics</td>
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<tr>
<td>PHY6041Y</td>
<td>Research in Geophysics</td>
</tr>
<tr>
<td>PHY6051Y</td>
<td>Research in Quantum Optics</td>
</tr>
<tr>
<td>PHY6071Y</td>
<td>Research in Subatomic Physics and Astrophysics</td>
</tr>
</tbody>
</table>
Physiology

Physiology: Introduction

Faculty Affiliation

Medicine

Degree Programs

Medical Physiology

MHSc

Physiology

MSc and PhD

Combined Degree Programs

• STG, MD / PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

• Biomedical Engineering
  o Physiology, MSc, PhD
• Cardiovascular Sciences
  o Physiology, MSc, PhD
• Developmental Biology
  o Physiology, MSc, PhD
• Neuroscience
  o Physiology, MSc, PhD
• Resuscitation Sciences (admissions have been administratively suspended)
  o Physiology, MSc, PhD

Overview

In the Department of Physiology, research ranges from the gene level to the organism level in areas including endocrinology and diabetes; reproduction endocrinology; fetal physiology, pregnancy, and parturition; neuroendocrinology; cardiorespiratory regulation; gastrointestinal motility; sensory physiology; motor control; brain development and aging; ionic channels and synaptic transmission; excitability, ultrastructure, and plasticity of the brain.

Contact and Address

MHSc Program

Web: www.physiology.utoronto.ca
Email: mhsc.physiology@utoronto.ca
Telephone: (416) 978-6843
Fax: (416) 978-4940

Department of Physiology
University of Toronto
Room 3209, Medical Sciences Building
1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

MSc and PhD Programs

Web: www.physiology.utoronto.ca
Email: graduate.physiology@utoronto.ca
Telephone: (416) 978-2601
Fax: (416) 978-4940

Department of Physiology
University of Toronto
Room 3217, Medical Sciences Building
1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Physiology: Graduate Faculty

Full Members

Adeli, Khosrow - DipChem, MSc, PhD
Anderson, Harvey - BSc, MSc, PhD
Bagli, Darius - BS, MD
Bear, Christine - BSc, MSc, PhD
Belik, Jaques - MD
Belsham, Denise - PhD
Bolz, Steffen-Sebastian - MD, DrMed
Brown, Theodore - BSc, PhD
Brubaker, Patricia - BSc, PhD
Caniggia, Isabella - MD, PhD
Carlen, Peter - MD
Collingridge, Graham - BSc, PhD
Connelly, Kim - MBBS, PhD
Cox, Brian - BSc, MSc, PhD
dos Santos, Claudia - MSc, MD
Duffin, James - BASc, MASc, PhD
Feng, Zhong-Ping - PhD (Graduate Coordinator, Student Admissions and Affairs)
Ferguson, Niall - MSc, MD
Fisher, Joseph - MD
Frankland, Paul - MA, PhD
Gaisano, Herbert - BS, MD
Giacca, Adria - MD
Gollob, Michael - MD
Gramolini, Anthony - BSc, MSc, PhD (Graduate Coordinator, Academic Affairs)
Hare, Gregory - MD, PhD
Harrison, Robert - PhD, DSc
Heximer, Scott - PhD (Chair and Graduate Chair)
Hill, Sean - BA, PhD
Husain, Mansoor - MB, MD
Hutchison, William Duncan - BSc, MSc, PhD
Jia, Zhengping - PhD
Jin, Tianru - PhD
Jones, Nicola - MD
Jossely, Sheena - MA, PhD
Jurisicova, Andrea - PhD
Kingdom, John - DipCH, MB, MD
Klip, Amira - ScD
Kuebler, Wolfgang - DrMed, PhD
Lam, Tony - BS, DPhil
Lambe, Evelyn - AB, MSc, PhD
Levitan, Robert - MSc, MDCM
Lewis, Gary - BCh, MBChB
Librach, Clifford - MD
Liu, Mingyao - MSc, MD
Lye, Stephen - BSc, PhD
Matthews, Stephen - BSc, DPhil
McGahan, Anita - BA, MA, MBA, PhD
McNamara, Patrick - MB
Miller, Freda - BSc, PhD
Monnier, Philippe - MBA, PhD
Ng, Dominic - MD
Nostro, Cristina - MSc, PhD
Orser, Beverley - MD
Pausova, Zdenka - MD
Post, Martin - PhD
Prescott, Steven - BSc, MSc, MD, PhD
Rocheleau, Jonathan - BSc, PhD
Rogers, Ian - MSc, PhD
Rosenblum, Norman - MD
Selzter, Se'ev - DMD, BMedSc
Sesso, Barry - BS, MDS, BDS, PhD
Skinner, Frances - PhD
Subbarao, Padmaja - MD
Sugita, Shuzo - PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Sweezeey, Neil - BSc, MD, MD
Thomas, Scott - BSc, MSc, PhD
Tweed, Douglas - MD, PhD, PhD
Tymianski, Michael - BA, MD, PhD
Wang, Lu-Yang - PhD (Vice Chair, Academic - Graduate)
Wheeler, Michael - BSc, PhD
Wilson, Gregory - MSc, MD
Wittnich, Carin - MSc, DVM
Zhang, Halbo - MSc, PhD
Zhen, Mei - PhD
Zhuo, Min - MS, PhD

Members Emeriti

Adamson, Susan - BSc, MSc, MD, PhD
Atwood, Harold - BA, MA, PhD, DSc, FRSC
Bocking, Alan - MD
Casper, Robert - MD
Challis, John - BSc, Phd, DSc, FRSC
Charlton, Milton - BSc, MSc, PhD
Dostrovsky, Jonathan - BSc, MSc, PhD
Kwan, Hon - BASc, MSc, PhD
Norwich, Kenneth - MSc, PhD
Pennefather, Peter - BSc, PhD
Schlichter, Lyanne - BSc, MSc, PhD
Sole, Michael - BSc, MD
Stanley, Elise - PhD
Wojtowicz, J. Martin - BSc, PhD

Associate Members

Friedberg, Mark - MD
Goldenberg, Neil - BSc, MD, PhD
Hay, Etya - BSc, MSc, PhD
Ivakine, Evgueni (Zhenya) - MSc, MSc, PhD
Kadis, Darren - BSc, MA, PhD
Laffey, John - BSc, MA, DrMed, MB
Lankarany, Milad - PhD
Mazer, Cyril David - MD
Miliotis, Helen - BSc, PhD
Min, Jinrong - PhD
Ni, Heyu - MSc, MD, PhD
O'Brien, Catherine - BSc, MSc, DrMed, PhD
Pierro, Agostino - MD
Ramsey, Amy - PhD
Shynlova, Oksana - MSc, PhD
Tripathy, Shreejoy - BSc, PhD

Physiology: Medical Physiology MHSc

Master of Health Science

Program Description

The MHSc in Medical Physiology is a professional course-based master's program, designed to provide graduates with the analytical and professional skills to interpret and apply physiology to health-related contexts.

The program blends advanced topic-specific physiology courses with:

- a mentored current literature review, where graduates acquire the critical analysis skills to identify new knowledge relevant to specific problems in human health;
- a big data and health course, where students gain the skills to analyze and interpret data sets relevant to human health;
- a commercialization and collaboration course, where students will acquire skills to understand how to commercialize new discoveries and how to work in a team science environment; and
- a practicum opportunity, where students will experience how physiological knowledge is applied to real-life scenarios in their area of interest.

Each graduate will develop the analytical and communication skills to design and implement new health interventions.

Students will develop an individual program based on their area of interest.
Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physiology’s additional admission requirements stated below.
- Admission is based on demonstrated exceptional scholarly achievement based on the following criteria:
  - a one-page statement summarizing how this program will contribute to the advancement of the applicant’s professional goals
  - a curriculum vitae (CV)
  - two letters of reference.
- Applicants must have an appropriate bachelor’s degree from a recognized university with an average of at least A– in the last two years of study. Students must have completed at least third year-level physiology or equivalent courses and demonstrate an interest in physiology.
- Selected applicants will be interviewed prior to final acceptance into the program.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - Other English proficiency tests are acceptable. Please consult the Physiology website for departmental standards.

Program Requirements

All students are required to:

- Take 6.0 full-course equivalents (FCEs) in physiology courses:
  - 1.0 FCE: PSL4000Y* Seminars and Graduate Professional Development (Credit/No Credit)
  - 1.0 FCE: PSL4010Y Mentored Literature Review Project in Physiology
  - 1.0 FCE: PSL4020Y Medical Physiology Practicum (Credit/No Credit)
  - 0.5 FCE: PSL4030H Clinical Physiology
  - 0.5 FCE: PSL4040H Big Data and Health
  - 0.5 FCE: PSL4050H Collaboration and Commercialization in Physiology
  - 1.5 elective FCEs.

Students will be matched with a mentor and practicum placement in consultation with the relevant course director and MHS program director.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

* Course that may continue over a program. Credit is given when the course is completed.

Physiology: Physiology MSc

Master of Science

Program Description

The MSc program provides advanced training in physiology, with an emphasis on gaining experience in conducting research using modern experimental methods under the direct supervision of a member of the department’s graduate faculty. Students will complete coursework, attend and give presentations of scientific work, submit a written thesis based on original research, and defend the thesis at an oral examination. It is not required that the thesis work be published or represent a finished research project, but it must show the student’s mastery of specific techniques, their application to a specific problem, and a scholarly understanding of the research subject. Through this program, students will broaden and deepen their knowledge of physiology and its current scientific literature. They will learn and practise scientific skills of critical thinking, devising research questions, and communicating scientific ideas orally and in writing.

Students may begin in Fall, Winter, or Summer.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physiology’s additional admission requirements stated below.
- Admission is based on academic record, an essay summarizing background strengths and scientific aims, a curriculum vitae (CV), and at least two confidential letters of reference.
- Applicants must have an appropriate bachelor’s degree from a recognized university with an average of at least A– in the last two years of study and with courses such as biology, biochemistry, calculus, organic and physical chemistry, general physics, and physiology.
- Physical-science-stream students from undergraduate programs in physics, mathematics, engineering, and other sciences are encouraged to apply to the MSc program.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - Other English proficiency tests are acceptable. Please consult the Physiology website for departmental standards.
Program Requirements

All students are required to:

- Take 1.5 full-course equivalents (FCEs) in physiology courses, with the following guidelines:
  - 0.5 FCE in PSL1000H0 MSc Seminars in Physiology (Credit/No Credit), mandatory for all graduate students in Physiology
  - 0.5 FCE in physiology graduate-only courses
  - 0.5 FCE with a choice of (i) a physiology graduate-only course or physiology joint graduate-undergraduate course (preferable option) or (ii) a course taken in another department (rare choice).
- Select courses in consultation with the supervisor and/or advisory committee. See the Physiology website for details.
- Complete and defend a research thesis acceptable to the graduate department.
- Do one of the following within 12 to 18 months in the MSc program:
  - Write and defend an MSc thesis and graduate.
  - Write and defend a thesis and go on to the PhD program.
  - Transfer from the MSc into the PhD program. Transfer is encouraged for students who have made substantial progress in their research and have demonstrated the desire and potential to meet the requirements of a rigorous research training program. Such students will have fulfilled all course requirements for the MSc with at least an A– average and have demonstrated potential for publication of their work. There must be a clearly identified program for future research that continues, or is consistent with, work already underway. Too large a project for the MSc is not a reason for transfer to the PhD.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

0 Course that may continue over a program. Credit is given when the course is completed.

PhD Program (Following Completion of an MSc)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physiology's additional admission requirements stated below.
- Admission is based on academic record, a statement summarizing background strengths and scientific aims, a curriculum vitae (CV), and at least two confidential letters of reference.
- Students may be admitted into the PhD program after completion of an appropriate MSc degree program with an average of at least A– from a recognized university. Students with excellent research experience are encouraged to apply.
- Applicants should have taken courses such as biology, biochemistry, calculus, organic and physical chemistry, general physics, and physiology.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - Other English proficiency tests are acceptable. Please consult the Physiology website for departmental standards.

Program Requirements

- Students must take 2.5 full-course equivalents (FCEs) in physiology courses in which an average standing of at least A– is maintained, with the following guidelines:
  - 0.5 FCE in PSL2000H0 PhD Seminars in Physiology (Credit/No Credit), mandatory for all graduate students in Physiology
  - 0.5 FCE in physiology graduate-only courses
  - 0.5 FCE in PSL1066H0 Research Grant Proposal (Credit/No Credit), mandatory for all PhD students in physiology
  - 1.0 FCE with a choice of (i) a physiology graduate-only course or physiology joint graduate-undergraduate course (preferable option) or (ii) a course taken in another department (rare choice).
Up to 1.0 FCE can be claimed from the student’s MSc program completed in another department or university, subject to approval by the Graduate Studies Committee.

Courses are selected in consultation with the supervisor and/or advisory committee. See the Physiology website for details.

The recommended completion time for the doctoral program is approximately four years, by which time the candidate will write and defend a research thesis, first before a departmental committee and subsequently before a committee approved by the School of Graduate Studies.

Program Length

4 years

Time Limit

6 years

PhD Program (Transfer)

Transfer Requirements

- Students may be admitted via transfer from the University of Toronto MSc program in Physiology. Transfer from the MSc into the PhD program is encouraged for students who have made substantial progress in their research and have demonstrated the desire and potential to meet the requirements of a rigorous research training program. Such students will have fulfilled all course requirements for the MSc with at least an A– average and have demonstrated potential for publication of their work. Students with excellent research experience are encouraged to apply. There must be a clearly identified program for future research that continues, or is consistent with, work already underway. Too large a project for the MSc is not a reason for transfer to the PhD.

Program Requirements

- Students must take 2.5 full-course equivalents (FCEs) in physiology courses in which an average standing of at least A– is maintained, with the following guidelines:
  - 0.5 FCE in PSL2000H0 *PhD Seminars in Physiology* (Credit/No Credit), mandatory for all graduate students in Physiology
  - 0.5 FCE in PSL1066H0 *Research Grant Proposal* (Credit/No Credit), mandatory for all PhD students in Physiology
  - 0.5 FCE in physiology graduate-only courses
  - 1.0 FCE with a choice of (i) a physiology graduate-only course or physiology joint graduate-undergraduate course (preferable option) or (ii) a course taken in another department (rare choice).
  - Students who transfer from the MSc program in Physiology may claim up to 1.0 FCE from the MSc program in Physiology.

Program Length

5 years

Time Limit

7 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Physiology’s additional admission requirements stated below.

- Admission is based on academic record, a statement summarizing background strengths and scientific aims, a curriculum vitae (CV), and at least two confidential letters of reference.

- For exceptional students with an A– standing in appropriate courses taken during the two preceding undergraduate years, direct entry into the doctoral program is possible. However, this will require specific approval by the Graduate Studies Committee. Students with excellent research experience are encouraged to apply.

- Applicants should have taken courses such as biology, biochemistry, calculus, organic and physical chemistry, general physics, and physiology.

- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Internet-based TOEFL: 100/120 and 22/30 on the writing and speaking sections.
  - Other English proficiency tests are acceptable. Please consult the Physiology website for departmental standards.

Program Requirements

- Students must take 2.5 full-course equivalents (FCEs) in physiology courses in which an average standing of at least A– is maintained, with the following guidelines:
- 0.5 FCE in PSL2000H\(^0\) PhD Seminars in Physiology (Credit/No Credit), mandatory for all graduate students in Physiology
- 0.5 FCE in physiology graduate-only courses
- 0.5 FCE in PSL1066H\(^0\) Research Grant Proposal (Credit/No Credit), mandatory for all PhD students in physiology
- 1.0 FCE with a choice of (i) a physiology graduate-only course or physiology joint graduate-undergraduate course (preferable option) or (ii) a course taken in another department (rare choice).

- Courses are selected in consultation with the supervisor and/or advisory committee. See the Physiology website for details.
- The recommended completion time for the doctoral program is five years, by which time the candidate will write and defend a research thesis, first before a departmental committee and subsequently before a committee approved by the School of Graduate Studies.

### Program Length

5 years

### Time Limit

7 years

\( ^0 \text{Course that may continue over a program. Credit is given when the course is completed.} \)

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**Physiology: Medical Physiology MHSc; Physiology MSc, PhD Courses**

Not all courses are offered each year. Check the departmental website for course availability and course requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JCV1060H</td>
<td>Developmental Cardiovascular Physiology</td>
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<tr>
<td>JCV3060H</td>
<td>Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction</td>
</tr>
<tr>
<td>JCV3061H</td>
<td>Advanced Topics in Cardiovascular Sciences — Hormones</td>
</tr>
<tr>
<td>JCV3062H</td>
<td>Advanced Research in Cardiovascular Sciences — Heart Function</td>
</tr>
<tr>
<td>JCV3063H</td>
<td>Advanced Research in Cardiovascular Sciences — Vascular</td>
</tr>
<tr>
<td>JCV3064H</td>
<td>Advanced Research in Cardiovascular Sciences — Microvascular Medicine</td>
</tr>
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<td>JCV3065H</td>
<td>Advanced Topics in Cardiovascular Sciences — Systems Biology</td>
</tr>
<tr>
<td>JPB1071H</td>
<td>Advanced Topics: Computational Neuroscience</td>
</tr>
<tr>
<td>JYG1555H</td>
<td>Advanced Topics: Cellular and Molecular Neurobiology</td>
</tr>
<tr>
<td>PSL1000H(^0)</td>
<td>MSc Seminars in Physiology (Credit/No Credit)</td>
</tr>
<tr>
<td>PSL1014H</td>
<td>Advanced Topics: the Gastrointestinal Epithelium</td>
</tr>
<tr>
<td>PSL1020H</td>
<td>Current Topics in Reproductive Endocrinology and Infertility</td>
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<tr>
<td>PSL1024H</td>
<td>Advanced Topics: Neuroendocrinology</td>
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<tr>
<td>PSL1026H</td>
<td>Advanced Topics: Experimental Cell Physiology</td>
</tr>
<tr>
<td>PSL1034H</td>
<td>Advanced Topics: Metabolic Disorders</td>
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<tr>
<td>PSL1036H</td>
<td>Advanced Topics: Respiration</td>
</tr>
<tr>
<td>PSL1040H</td>
<td>Advanced Topics: Systems Biology in Physiology</td>
</tr>
<tr>
<td>PSL1047H</td>
<td>Advanced Topics: Somatosensory and Pain Neuroscience</td>
</tr>
<tr>
<td>PSL1048H</td>
<td>Translational Physiology: From Molecules to Model Systems to the Clinic</td>
</tr>
<tr>
<td>PSL1050H</td>
<td>Advanced Topics: The Hippocampus from Cell to Behaviour</td>
</tr>
<tr>
<td>PSL1053H</td>
<td>Advanced Topics: Critical Assessment of Ion Channel Function</td>
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<tr>
<td>PSL1066H(^0)</td>
<td>Research Grant Proposal (Credit/No Credit)</td>
</tr>
<tr>
<td>PSL1067H</td>
<td>Advanced Topics: Advances and Techniques in Developmental Physiology</td>
</tr>
<tr>
<td>PSL1068H</td>
<td>Advanced Topics: Molecular Basis of Behaviour</td>
</tr>
<tr>
<td>PSL1070H</td>
<td>Advanced Topics: Hormone Action</td>
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<td>PSL1072H</td>
<td>Advanced Topics in the Neural Basis for Sensation</td>
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<tr>
<td>PSL1075H</td>
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<td>PSL1080H(^+)</td>
<td>Advanced Topics: Investigative Developmental Physiology</td>
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<tr>
<td>PSL1086H</td>
<td>Comparative Systems Approach to Diving Physiology</td>
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<tr>
<td>PSL2000H(^0)</td>
<td>PhD Seminars in Physiology (Credit/No Credit)</td>
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<tr>
<td>PSL4000Y(^0)</td>
<td>Seminars and Graduate Professional Development (Credit/No Credit)</td>
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<tr>
<td>PSL4010Y</td>
<td>Mentored Literature Review Project in Physiology</td>
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<tr>
<td>PSL4020Y</td>
<td>Medical Physiology Practicum (Credit/No Credit)</td>
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<td>PSL4030H</td>
<td>Clinical Physiology</td>
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<tr>
<td>PSL4040H</td>
<td>Big Data and Health</td>
</tr>
<tr>
<td>PSL4050H</td>
<td>Collaboration and Commercialization in Physiology</td>
</tr>
</tbody>
</table>
* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

◊ Course that may continue over a program. The course is graded when completed.

### Joint Graduate/Undergraduate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience: Cellular and Molecular</td>
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<tr>
<td>JNS1000Y</td>
<td>Fundamentals of Neuroscience: Systems and Behaviour</td>
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<tr>
<td>PSL1374H</td>
<td>Advanced Physiology Laboratory</td>
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<td>PSL1421H</td>
<td>Pregnancy and Birth: From Implantation to Newborn Life</td>
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<tr>
<td>PSL1425H</td>
<td>Integrative Metabolism and Its Endocrine Regulation</td>
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<td>PSL1432H</td>
<td>Theoretical Physiology</td>
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<tr>
<td>PSL1441H</td>
<td>Systems Level Neuroplasticity</td>
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<tr>
<td>PSL1445H</td>
<td>Mechanistic Molecular and Cellular Neuroscience</td>
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<tr>
<td>PSL1446H</td>
<td>Molecular and Cellular Aspects of Neural Disorders</td>
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<tr>
<td>PSL1452H</td>
<td>Fundamentals of Ion Channel Function</td>
</tr>
<tr>
<td>PSL1462H</td>
<td>Molecular Aspects of Cardiovascular Function</td>
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Political Science

Political Science: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Political Science

MA

- Fields:
  - Political Economy of International Development;
  - Political Science;
  - Political Theory

PhD

- Fields:
  - Canadian Politics;
  - Comparative Politics;
  - Development Studies;
  - International Relations;
  - Political Theory;
  - Public Policy

Combined Degree Programs

- STG, Law, JD / Political Science, PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Contemporary East and Southeast Asian Studies
  - Political Science, MA
- Development Policy and Power
  - Political Science, MA
- Diaspora and Transnational Studies
  - Political Science, MA, PhD
- Environmental Studies
  - Political Science, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - Political Science, MA, PhD
- Global Health (U of T Global Scholar)
  - Political Science, PhD
- Jewish Studies
  - Political Science, MA, PhD
- Sexual Diversity Studies
  - Political Science, MA, PhD
- South Asian Studies
  - Political Science, PhD
- Women and Gender Studies
  - Political Science, MA, PhD

Overview

The Department of Political Science is one of the largest political science departments in the western world. It is committed to fostering a collegial environment for graduate students and personal interaction between faculty and students.

The department has a large and academically diverse research-oriented faculty, well represented in the various sub-fields of the discipline (Political Theory, International Relations, Comparative Politics, Development Studies, Canadian Politics, and Public Policy). The department also participates in a wide range of interdisciplinary graduate programs.

Since entrance requirements and standards of work are high, so is the calibre of students. Many hold prestigious fellowships, and several have recently won major awards, including the Canadian Political Science Association and American Political Science Association’s prizes for best doctoral theses in their areas.

Graduates have gone on to academic careers, public service, and other work in all provinces of Canada, the United States, and many other countries. The University maintains an active placement service to assist graduate students seeking employment in the academic world. Graduate students have established the Graduate Association for Students in Political Science to foster intellectual exchanges, social events, and student participation in all aspects of department life.

Contact and Address

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Email: louis.tentsos@utoronto.ca
Telephone: (416) 978-2017
Fax: 416-978-5566

Department of Political Science
University of Toronto
Room 3025, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Political Science: Graduate Faculty

Full Members

Adler, Emanuel - MA, PhD, FRSC
Balot, Ryan - BA, AM, PhD
Bashevkin, Sylvia - BA, MA, PhD, FRSC
Batthelt, Harald - MA, PhD, CRC
Beiner, Ronald - BA, DPhil
Bernstein, Steven - PhD (Director of Graduate Studies)
Bertoldi, Nancy - BA, MA, PhD
Bertrand, Jacques - BA, MSc, MA, DrRerPol
Braun, Aurel - BA, MA, PhD
Breznitz, Dan - BA, PhD
Cameron, David - PhD, FRSC
Political Science: Political Science MA

Master of Arts

Program Description

The MA program is designed to satisfy the diverse interests of students who wish to pursue a year of graduate study in political science. Students admitted to the MA program may choose from three fields: Political Economy of International Development; Political Science; and Political Theory. Students whose interests are primarily normative and philosophical may choose the field of Political Theory.

The MA program may be taken on a full-time or part-time basis.
Field: Political Economy of International Development (PEID)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Political Science's additional admission requirements stated below.
- Cumulative grade average equivalent to a University of Toronto B+ or better in an appropriate bachelor's degree program. Preference will be given to applicants with outstanding academic records and a strong background in political science.
- Applicants must provide evidence of a satisfactory background in political science and a second social science. Applicants intending to enrol in a master's-level economics course must meet undergraduate prerequisites in microeconomics, macroeconomics, and statistics. A satisfactory background in political science means a minimum of five well-distributed courses including at least one relating to development.
- Admission is competitive. Enrolment in the program is limited, and meeting minimum requirements does not guarantee admission. All applicants are considered on their individual merit by a departmental admissions committee. Applicants lacking an adequate background in political science may be required to complete additional undergraduate courses before being considered for admission. Such work should be undertaken in consultation with the MA supervisor.
- Applicants must submit a complete application according to instructions on the department's website.

Program Requirements

- Coursework. Students must complete a minimum of 4.0 full-course equivalents (FCEs) as follows:
  - POL2408H Political Economy of International Development (0.5 FCE).
  - Either POL2345H Politics of Growth in Developing Countries or POL2400H Theories and Issues — The Politics of Development (0.5 FCE).
  - 0.5 FCE in anthropology, geography, or economics, selected from an approved course list.
  - 1.0 FCE from the approved political science course list.
  - A research essay in the political economy of international development within the context of the MA Research Seminars, POL2810Y MA Research Seminar I or POL2811Y MA Research Seminar II (1.0 FCE). Students enrolled in a collaborative specialization with a similar requirement are exempted.
  - 0.5 FCE from either list of approved courses.
- The equivalent of 1.0 FCE may be taken in a cognate discipline with the approval of the department.
- Programs in which additional requirements or prerequisites must be met may take longer than three sessions to complete.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time; 6 years part-time

Field: Political Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Political Science's additional admission requirements stated below.
- Cumulative grade average equivalent to a University of Toronto B+ or better in an appropriate bachelor's degree program. Preference will be given to applicants with outstanding academic records and a strong background in political science.
- Admission is competitive. Enrolment in the program is limited, and meeting minimum requirements does not guarantee admission. All applicants are considered on their individual merit by a departmental admissions committee. Applicants lacking an adequate background in political science may be required to complete additional undergraduate courses before being considered for admission. Such work should be undertaken in consultation with the MA supervisor.
- Applicants must submit a complete application according to instructions on the department's website.

Program Requirements

- Coursework. Students must complete a minimum of 4.0 full-course equivalents (FCEs) including:
  - At least 0.5 FCE in Political Theory, which can be either POL2040H Horizons of Political Reflection or any other theory course.
  - At least 0.5 FCE in statistics or research design. POL2503H Thinking Through Research Design and POL2504H Statistics for Political Scientists are among the courses currently offered by the department which meet this requirement.
  - The equivalent of 1.0 FCE may be taken in a cognate discipline with the approval of the department.
  - A research essay (1.0 FCE) within the context of the MA Research Seminars, POL2810Y MA Research Seminar I or POL2811Y MA Research Seminar II. Students enrolled in a collaborative specialization with a similar requirement are exempted.
- Programs in which additional requirements or prerequisites must be met may take longer than three sessions to complete.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time; 6 years part-time
Field: Political Theory

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Political Science's additional admission requirements stated below.
- Cumulative grade average equivalent to a University of Toronto B+ or better in an appropriate bachelor's degree program. Preference will be given to applicants with outstanding academic records and a strong background in political science.
- Admission is competitive. Enrolment in the program is limited, and meeting minimum requirements does not guarantee admission. All applicants are considered on their individual merit by a departmental admissions committee. Applicants lacking an adequate background in political science may be required to complete additional undergraduate courses before being considered for admission. Such work should be undertaken in consultation with the MA supervisor.
- Applicants must submit a complete application according to instructions on the department's website.

Program Requirements

- Coursework. Students must complete a minimum of 4.0 full-course equivalents (FCEs) as follows:
  - 2.0 FCEs in Political Theory.
  - At least 1.0 FCE in an area outside Political Theory.
  - The equivalent of 1.0 FCE may be taken in a cognate discipline with the approval of the department.
  - All courses must be chosen in consultation with the MA supervisor.
- Programs in which additional requirements or prerequisites must be met may take longer than three sessions to complete.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time; 6 years part-time

Political Science: Political Science PhD

Doctor of Philosophy

Program Description

PhD students will declare two fields:

- Field 1 will be one of:
  - Canadian Politics
  - Comparative Politics
  - International Relations
  - Political Theory
  - Public Policy

Field 2 will be one of:

- Canadian Politics
- Comparative Politics
- Development Studies
- International Relations
- Political Theory
- Public Policy

Applicants may be admitted to the PhD program via one of three routes:

- With an MA: excellent students who have completed an MA degree in political science (or its equivalent) by the time of enrolment.
- Transfer: in exceptional cases, on the initiative of the Director of Graduate Studies, MA students may be transferred to the PhD program. Such transfers will occur only where a full assessment of an applicant's bachelor's record (or equivalent) was impossible and where that student's instructors concur that the student in question has excelled in the first half of the MA program.
- Direct-entry: exceptional students who have completed an appropriate bachelor's degree with a concentration in political science by the time of enrolment. Students admitted to the PhD from a bachelor's degree who receive less than an A– average in their first four courses will be recommended to SGS to transfer to the MA program. If the transfer is approved, these students will graduate with a terminal MA, provided their grades meet the requirements for the MA degree.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Political Science’s additional admission requirements stated below.
- Applicants must have completed an MA degree in political science (or its equivalent) by the time of enrolment.
- Applicants are expected to have achieved grades averaging A– or better in their most recent degree.
- Applicants must submit a complete application according to the instructions.

Program Requirements

- Coursework. Students must complete 2.0 to 5.0 full-course equivalents (FCEs) depending on the student's relevant background in the fields or areas of choice:
  - Most students entering with an MA take the equivalent of 4.0 FCEs to satisfy program requirements; students must take a minimum of 2.0 FCEs with the department after entering the PhD program.
  - Graduate courses taken at the MA level at the University of Toronto or elsewhere may be counted, with the department's permission, towards meeting some course requirements.
• Students will declare two fields:
  o Field 1 will be one of Canadian Politics, Comparative Politics, International Relations, Political Theory, or Public Policy. The normal course requirement for Field 1 will be 2.0 FCEs, including a 1.0 FCE core course requirement.
  o Field 2 will be one of Canadian Politics, Comparative Politics, Development Studies, International Relations, Political Theory, or Public Policy. The normal course requirement for Field 2 will be 1.5 FCEs, including a 1.0 FCE core course requirement (with the exception of a 0.5 FCE core course requirement in Development Studies).
• The Director of Graduate Studies may exercise discretion to waive the Field 2 requirement for students enrolled in collaborative specializations.
• Students who do not designate Political Theory as Field 1 must complete 0.5 FCE in qualitative methods. This requirement may be waived on the basis of MA work.
• Students who do not designate Political Theory as Field 1 must complete 0.5 FCE in quantitative methods. This requirement may be waived on the basis of MA work.
• Students who do not designate Political Theory as Field 1 must complete 0.5 FCE in quantitative methods. This requirement may be waived on the basis of MA work.
• Students who do not designate Political Theory as Field 1 will be one of Canadian Politics, Comparative Politics, Development Studies, International Relations, Political Theory, or Public Policy. The normal course requirement for Field 2 will be 1.5 FCEs, including a 1.0 FCE core course requirement (with the exception of a 0.5 FCE core course requirement in Development Studies).
• Students must complete POL2812Y PhD Research Design (1.0 FCE), normally during Year 3; students who have designated Political Theory as Field 1 are exempted.
• Field examinations.
  o Students must complete field examinations in Field 1 and Field 2 by the end of Year 2.
  o The Field 1 examination should be taken in May or August of the year in which the core course is taken as long as all assignments in the core course have been completed.
  o The Field 2 examination must be taken no later than Year 2.
  o A student who fails to achieve a grade of at least A– is permitted one opportunity to retake a field examination. After failing the examination once, the student is permitted two attempts to pass the examination in a new field.
• Thesis proposal, thesis committee, and thesis schedule. Students should assign a high priority to defining a thesis topic and choosing a thesis committee. By December of Year 3, students must have:
  o Established a thesis committee of three faculty members including a thesis supervisor and
  o Completed a draft of a thesis proposal of approximately 25 pages for submission to the thesis committee. Final revisions of the proposal must be approved by the end of Year 3. The research and writing of the thesis will follow the acceptance of the thesis proposal. The work schedule should permit the student to complete the thesis by the end of Year 5.
• Language requirement. Students must demonstrate competence in the language that is appropriate to the nature of the graduate work in which they are engaged. Students whose Field 1 is Canadian Politics are strongly encouraged to demonstrate competence in French.
• University policy requires that students complete all their non-thesis requirements (coursework, thesis proposal, Field 1 and Field 2 qualifying exams, and language requirements) by the end of Year 3.
• Students must achieve an A– average in coursework and an A– in their field examinations to remain in good standing.
• Minimum of three sessions in residence, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.
• Although the program has been designed for completion in four years, some students may require longer to complete all the requirements.

Program Length
4 years full-time; 5 years transfer-from-master’s

Time Limit
6 years full-time; 7 years transfer-from-master’s

PhD Program (Direct-Entry)

Minimum Admission Requirements
• Applicants are admitted under the General Regulations of the School of Graduate Studies.
• Applicants must also satisfy the Department of Political Science’s additional admission requirements stated below.
• Exceptional students who have completed an appropriate bachelor’s degree with a concentration in political science by the time of enrolment. Such students who receive less than an A– average in their first four courses will be considered for direct entry to the PhD program. If the transfer is approved, these students will graduate with a terminal MA, provided their grades meet the requirements for the MA degree and provided they meet the course requirements of one of the three MA fields.
• Applicants are expected to have achieved grades averaging A– or better in their most recent degree. Applicants from the BA level will apply to the MA program but indicate on the MA application that they wish to be considered for direct entry to the PhD program.
• Applicants must submit a complete application according to the instructions.

Program Requirements
• Coursework. Students must complete 6.0 full-course equivalents (FCEs) with at least an A– average in their first four courses in order to continue in the PhD program. In selecting courses, students should ensure that they satisfy the following field requirements.
• Students will declare two fields:
  o Field 1 will be one of Canadian Politics, Comparative Politics, International Relations, Political Theory, or Public Policy. The normal course requirement for Field 1 will be 2.0 FCEs, including a 1.0 FCE core course requirement.
Field 2 will be one of Canadian Politics, Comparative Politics, Development Studies, International Relations, Political Theory, or Public Policy. The normal course requirement for Field 2 will be 1.5 FCEs, including a 1.0 FCE core course requirement (with the exception of a 0.5 FCE core course requirement in Development Studies).

- The Director of Graduate Studies may exercise discretion to waive the Field 2 requirement for students enrolled in collaborative specializations.
- Students who do not designate Political Theory as Field 1 must complete 0.5 graduate-level FCE in Political Theory.
- Students must complete 0.5 FCE in qualitative methods. This requirement may be waived on the basis of MA work.
- Students who do not designate Political Theory as Field 1 must complete 0.5 FCE in quantitative methods. Students who designate Political Theory as Field 1 will substitute a non-waivable 0.5 FCE intensive reading requirement for the quantitative methods requirement.
- Students must complete POL2812Y PhD Research Design (1.0 FCE), normally during Year 4; students who have designated Political Theory as Field 1 are exempted.

Field examinations.
- Students must complete field examinations in Field 1 and Field 2 by the end of Year 2.
- The Field 1 examination should be taken in May or August of the year in which the core course is taken as long as all assignments in the core course have been completed.
- The Field 2 examination must be taken no later than Year 2. A student who fails to achieve a grade of at least A– is permitted one opportunity to retake a field examination. After failing the examination once, the student is permitted two attempts to pass the examination in a new field.

Thesis proposal, thesis committee, and thesis schedule. Students should assign a high priority to defining a thesis topic and choosing a thesis committee. By December of Year 4, students must have:
- Established a thesis committee of three faculty members including a thesis supervisor and
- Completed a draft of a thesis proposal of approximately 25 pages for submission to the thesis committee. Final revisions of the proposal must be approved by the end of Year 4. The research and writing of the thesis will follow the acceptance of the thesis proposal. The work schedule should permit the student to complete the thesis by the end of Year 6.

Language requirement. Students must demonstrate competence in the language that is appropriate to the nature of the graduate work in which they are engaged. Students whose Field 1 is Canadian Politics are strongly encouraged to demonstrate competence in French.

University policy requires that students complete all their non-thesis requirements (coursework, thesis proposal, Field 1 and Field 2 qualifying exams, and language requirements) by the end of Year 4.

Students must achieve an A– average in coursework and an A– in their field examinations to remain in good standing.

Minimum of six sessions in residence, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Although the program has been designed for completion in five years, some students may require longer to complete all the requirements.

Program Length
5 years

Time Limit
7 years

Political Science: Political Science MA, PhD Courses

Some listed courses have an undergraduate component and begin the first week of the session. Not all courses are given every year. Consult the [departmental timetable](#).

### Canadian Politics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>POL2100H</td>
<td>Issues and Foundations in Canadian Government (core)</td>
</tr>
<tr>
<td>POL2102H</td>
<td>Topics in Canadian Politics I</td>
</tr>
<tr>
<td>POL2103H</td>
<td>Topics in Canadian Politics II</td>
</tr>
<tr>
<td>POL2104H</td>
<td>Political Analysis in Canadian and Comparative Politics (core)</td>
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<tr>
<td>POL2105H</td>
<td>Canadian and Comparative Political Development (core)</td>
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<td>POL2128H</td>
<td>Federalism and Diversity in Canada (and Beyond)</td>
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<td>POL2139H</td>
<td>The Canadian Welfare State in Comparative Perspective</td>
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<td>POL2167H</td>
<td>The Politics of Immigration and Multiculturalism in Canada</td>
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<tr>
<td>POL2316H</td>
<td>Women and Politics</td>
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<td>POL2317H</td>
<td>Politics and Policy Analysis</td>
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<td>HAD5765H</td>
<td>Case Studies in Health Policy</td>
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### Comparative Politics

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<tr>
<td>POL2139H</td>
<td>The Canadian Welfare State in Comparative Perspective</td>
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<tr>
<td>POL2241H</td>
<td>Civil War and Counterinsurgency</td>
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<tr>
<td>POL2301H</td>
<td>Political Parties in Comparative Perspective</td>
</tr>
<tr>
<td>POL2307H</td>
<td>Political Economy of Technology: from the Auto-Industrial to the Information Age</td>
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<tr>
<td>POL2314H</td>
<td>Public, Private, and the Liberal State</td>
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<td>POL2316H</td>
<td>Women and Politics</td>
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<td>POL2317H</td>
<td>Politics and Policy Analysis</td>
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### Development Studies

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<tr>
<td>POL2326H</td>
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<td>POL2345H</td>
<td>Politics of Growth in Developing Countries</td>
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<td>POL2351H</td>
<td>Contentious Politics and Social Movements</td>
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<td>JPA2353H</td>
<td>Authoritarianism in Comparative Perspective</td>
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<td>POL2364H</td>
<td>Urban Policy and Policymaking</td>
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<td>POL2372H</td>
<td>The Comparative Political Economy of Industrial Societies</td>
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<td>JRA2391H</td>
<td>Topics in Comparative Politics</td>
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<td>POL2391H</td>
<td>Topics in Comparative Politics III</td>
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<td>POL2392H</td>
<td>Topics in Comparative Politics IV</td>
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<td>POL2394H</td>
<td>Innovation and Knowledge Transfer in City Regions</td>
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<td>POL2411H</td>
<td>Topics in Asian Politics</td>
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<td>POL2418H</td>
<td>Topics in Middle East Politics</td>
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<tr>
<td>JPF2430H</td>
<td>Conceptualizing Cities in a Global Context</td>
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<tr>
<td>JPF2431H</td>
<td>Global Cities — Core Issues and Challenges (exclusion: JPF2409Y)</td>
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<tr>
<td>POL2700H</td>
<td>Foundations and Approaches to Comparative Politics (core)</td>
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<tr>
<td>POL2701H</td>
<td>Comparative Institutional Politics: Governance, Parties, and Structures of State Power (core)</td>
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<tr>
<td>POL2702H</td>
<td>Constituent Power in Comparative Perspective: Identity, Contention, and Mobilization (core)</td>
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### International Relations

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<tr>
<td>JPF2430H</td>
<td>Conceptualizing Cities in a Global Context</td>
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<tr>
<td>JPF2431H</td>
<td>Global Cities — Core Issues and Challenges (exclusion: JPF2409Y)</td>
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<tr>
<td>JPJ2037H</td>
<td>International Trade Regulation</td>
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<tr>
<td>JPJ2046H</td>
<td>Law, Institutions, and Development</td>
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<tr>
<td>POL2200Y</td>
<td>International Politics (core)</td>
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<td>POL2205H</td>
<td>Topics in International Politics I</td>
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<td>Topics in International Politics II</td>
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<td>POL2212H</td>
<td>Human Rights, Politics, and International Relations</td>
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<td>Global Environmental Politics</td>
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<td>POL2226H</td>
<td>Ethics and International Relations</td>
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<td>POL2240H</td>
<td>Geopolitics of Cyberspace</td>
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<tr>
<td>POL2241H</td>
<td>Civil War and Counterinsurgency</td>
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<td>POL2256H</td>
<td>Global Summit Governance and Diplomacy</td>
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<td>POL2258H</td>
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<tr>
<td>POL2335H</td>
<td>Business and Politics: Power in a Global World</td>
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### Political Theory

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<tr>
<td>POL2000H</td>
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<td>POL2002H</td>
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<td>POL2007H</td>
<td>Twentieth-Century Political Thought</td>
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<td>POL2011H</td>
<td>Problems in the Political Thought of the Socratic School</td>
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<td>POL2019Y</td>
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<td>Enlightenment and its Critics</td>
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<td>Fanaticism: A Political History</td>
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<td>JPR2058H</td>
<td>Post-secular Political Thought: Religion, Radicalism, and the Limits of Liberalism</td>
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<td>POL2061H</td>
<td>Studies in Civic Republicanism</td>
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<td>POL2075H</td>
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<td>POL2226H</td>
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<td>POL2371H</td>
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<td>RLG3622H</td>
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<td>POL2307H</td>
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<td>POL2317H</td>
<td>Politics and Policy Analysis</td>
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<td>POL2318H</td>
<td>Public Policy: Theories and Approaches (core)</td>
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<tr>
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<td>Public Policy: Applications (core)</td>
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<td>Case Studies in Health Policy</td>
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<td>POL2504H</td>
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**Public Policy**

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**Methods and Research Seminars**

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**Independent Study and Special Topics**

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<tr>
<td>POL2800H</td>
<td>Special Topics I</td>
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Psychological Clinical Science

Psychological Clinical Science: Introduction

Faculty Affiliation

University of Toronto Scarborough (UTSC)

Degree Programs

Counselling and Clinical Psychology

MA and PhD

- Fields:
  - Clinical Psychology — offered by the Graduate Department of Psychological Clinical Science, UTSC;
  - Clinical and Counselling Psychology — offered by the Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education [OISE], St. George campus

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Counselling and Clinical Psychology (OISE and UTSC), MA, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Counselling and Clinical Psychology (OISE), MA, PhD
- Community Development
  - Counselling and Clinical Psychology (OISE), MA, PhD
- Environmental Studies
  - Counselling and Clinical Psychology (OISE), MA, PhD
- Indigenous Health
  - Counselling and Clinical Psychology (OISE), MA, PhD
- Sexual Diversity Studies
  - Counselling and Clinical Psychology (OISE), MA, PhD
- Women and Gender Studies
  - Counselling and Clinical Psychology (OISE), MA, PhD

Overview

The Graduate Department of Psychological Clinical Science (UTSC) and the Department of Applied Psychology and Human Development (OISE) offer a graduate program in Counselling and Clinical Psychology leading to the MA and PhD degrees.

Contact and Address

Web: [www.utsc.utoronto.ca/psych/clinical-psychology](http://www.utsc.utoronto.ca/psych/clinical-psychology)
Email: clinical-psych@utsc.utoronto.ca
Telephone: (416) 287-7131

Graduate Department of Psychological Clinical Science
University of Toronto Scarborough (UTSC)
Science Wing, Room SW427G
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Psychological Clinical Science: Graduate Faculty

Full Members

Bagby, Michael - BA, MA, PhD
Best, Michael William - BA, MASc, PhD
Goghari, Vina - BA, MA, PhD
Ruocco, Anthony Charles - BS, MSc, PhD
Segal, Zindel - BA, MA, PhD
Ulissiez, Amanda Ann - BA, MA, PhD (Program Coordinator)
Zakzanis, Konstantine - BA, MA, PhD

Associate Members

Agid, Ofer - MD
Andersen, Judith - BSc, MA, PhD
Black, Sandra - BSc, MD
Bury, Alison - PhD
Carlson, Erika Nicole - BS, MA, MA, PhD
Cooper, Andrew Astley - BSc, MA, PhD
Cunningham, William - BA, MPH, MS, MA, PhD
Dere, Jessica - BA, MPsy, PhD
Edelstein, Kim - PhD
Erb, Suzanne - BSc, MA, PhD
Farb, Norman - BA, MA, PhD
Fitzgerald, Nicola - BASc, AM, PhD
Fournier, Marc - BA, PhD
Foussias, George - BSc, MSc, DrMed, PhD
Fuss, Samantha - BA, MA, PhD
Goldstein, Benjamin - MD
Green, Robin - PhD
Hendershot, Christian - PhD
Inzlicht, Michael - BSc, MSc, PhD
Ito Lee, Rutsuko - BA, PhD
Kidd, Sean - PhD
Kolla, Nathan - BA, MA, MD, PhD
Lee, Andy C.H. - BA, PhD
Ng, Longena - BS, MA, PhD
Penney, Stephanie - BA, MA, PhD
Quilty, Lena - BSc, PhD
Rabin, Jenny - PhD
Rashid, Tayyab - DPhil
Rector, Neil - MA, MA
Remington, Gary - MD, PhD
Sabiston, Catherine - BS, MA, PhD
Schmuckler, Mark - BA, PhD
Sloan, Matthew - MSc, MD
Psychological Clinical Science: Counselling and Clinical Psychology MA; Field: Clinical Psychology

Master of Arts

Program Description

The field in Clinical Psychology is offered primarily by the Department of Psychological Clinical Science at UTSC. Clinical Psychology at UTSC adheres to a Clinical Science model of training and is accredited by the Canadian Psychological Association (CPA). The primary and overriding objective of graduate training in Clinical Psychology at UTSC is to foster exceptional clinical scientists according to the highest standards of research and professional practice.

Graduate training in Clinical Psychology at UTSC has primary research strengths in the areas of: clinical and cognitive neuroscience, psychological assessment and clinical neuropsychology, psychopathology, personality, and mindfulness- and acceptance-based psychotherapies.

The field in Clinical Psychology adheres to a generalist model of training, with a primary focus on adults. A unifying theme of faculty research in Clinical Psychology at UTSC is to advance knowledge of the etiology and assessment and treatment of mental disorders. Instruction is provided in psychopathology, assessment, and intervention, and students are trained to practise with a variety of adult populations. The field also boasts strength in neuropsychology.

The full-time, two-year MA program is designed for applicants interested in working as researchers or practitioners in a variety of psychological and academic settings. This program enables students to apply for registration with the College of Psychologists of Ontario (CPO) as a Psychological Associate. It also meets the needs of students who plan to apply to the PhD program in Counselling and Clinical Psychology.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychological Clinical Science’s additional admission requirements stated below.
- A four-year bachelor’s degree from a recognized university with at least an A– (or first-class standing) in the final two years of undergraduate study, and at least 4.0 to 6.0 full-course equivalents (FCEs) in psychology including statistics and some laboratory research experience. Students who are admitted to the program without 4.0 to 6.0 FCEs in required undergraduate coursework may be required to complete additional courses in the master’s program. Applicants with a strong background in mathematics, computer science, statistics, biological science, or neuroscience are encouraged to apply.
- Competitive scores on General and Subject (Psychology) tests of the Graduate Record Examinations (GRE). Note: the GRE requirement has been waived for the 2022-23 admissions cycle.
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Department Application Form.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must demonstrate proficiency in English. Applicants must complete the Test of English as a Foreign Language (TOEFL), or its equivalent according to SGS regulations, prior to submitting the application. See General Regulations section 4.3 for requirements.

Program Requirements

- **Coursework.** The Clinical Psychology field for the MA in Counselling and Clinical Psychology requires **5.0 full-course equivalents (FCEs)**, including an ethics course, practicum-based courses, a clinical practicum, and a thesis.
  - 4.5 FCEs as follows:
    - **Year 1:**
      - CPS1601H Psychopathology (0.5 FCE);
      - CPS1701H Psychological Assessment I (0.5 FCE);
      - CPS1702H Psychological Assessment II (0.5 FCE);
      - CPS1801H Psychotherapy (0.5 FCE);
      - CPS1901H Ethics (0.5 FCE).
    - **Year 2:**
      - CPS1101H Clinical Research Design (0.5 FCE);
      - CPS1102H Statistical Techniques I (0.5 FCE);
      - CPS1802H Applied Interventions in Clinical Psychology (0.5 FCE);
      - CPS1803H Practicum in Psychological Interventions (0.5 FCE).
  - 0.5 FCE: Students must complete a clinical practicum at a pre-approved placement site in the final Summer of the program (CPS2999H Summer Practicum).

- **Research thesis** to be completed and orally defended in Year 2 of the program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time
Psychological Clinical Science: Counselling and Clinical Psychology PhD; Field: Clinical Psychology

Doctor of Philosophy

Program Description

The **field in Clinical Psychology** is offered primarily by the Graduate Department of Psychological Clinical Science at UTSC. Clinical Psychology adheres to a Clinical Science model of training and is accredited by the Canadian Psychological Association (CPA). The primary and overriding objective of graduate training is to foster exceptional clinical scientists according to the highest standards of research and professional practice. Graduate training in Clinical Psychology at UTSC has primary research strengths in the areas of: clinical and cognitive neuroscience, psychological assessment and clinical neuropsychology, psychopathology, personality, and mindfulness- and acceptance-based psychotherapies.

The field in Clinical Psychology adheres to a generalist model of training, with a primary focus on adults. A unifying theme of faculty research in Clinical Psychology at UTSC is to advance knowledge of the etiology and assessment and treatment of mental disorders. Instruction is provided in psychopathology, assessment, and intervention, and students are trained to practise with a variety of adult populations. The field also boasts strength in neuropsychology.

The PhD program is designed for applicants interested in a career as a clinical psychologist based on a Clinical Science model of training. Graduate training in Clinical Psychology at UTSC prepares graduates primarily for research and clinical careers as clinical scientists in university and medical and psychological settings.

The field is distinguished by its innovative cross-disciplinary approach that emphasizes scientific innovation through novel research collaborations that push traditional boundaries in clinical psychology. Importantly, the program meets the needs of students who plan to engage in research, teaching, and/or evidence-based clinical practice. This program is intended to meet the registration requirements of the College of Psychologists of Ontario (CPO) at the doctoral level.

The Counselling and Clinical Psychology program (Clinical Psychology field) is offered on a full-time basis, and progress in the program will be reviewed annually.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychological Clinical Science's additional admission requirements stated below.
- A master's degree in Clinical Psychology (or its equivalent) from a recognized university, with a minimum A– average and excellent research performance.
- Competitive scores on General and Subject (Psychology) tests of the Graduate Record Examinations (GRE). Note: the GRE requirement has been waived for the 2022-23 admissions cycle.
- Two academic letters of reference.
- A personal statement.
- A curriculum vitae.
- Completion of the Department Application Form.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must demonstrate proficiency in English. Applicants must complete the Test of English as a Foreign Language (TOEFL), or its equivalent according to SGS regulations, prior to submitting the application. See General Regulations section 4.3 for requirements.

Program Requirements

- The PhD program requires **5.5 full-course equivalents (FCEs)** including coursework, three clinical placements, plus a comprehensive examination, thesis proposal, thesis, and thesis defence:
  - 3.5 FCEs in coursework, normally completed by the end of Year 3 (CPS1103H, CPS1201H, CPS1301H, CPS1401H, CPS2901H, CPS2902H, CPS3901H).
  - 2.0 FCEs in clinical work:
    - 1.0 FCE in two separate part-time clinical placements during Years 1 and 2 (CPS3999H and CPS4999H).
    - 1.0 FCE in a one-year, full-time internship at a Canadian Psychological Association- or American Psychological Association-accredited clinical setting (or equivalent), which normally takes place during Year 5 (CPS5999Y). Eligibility for the clinical internship will be assessed by the Director of Clinical Training (DCT) prior to Year 4 of the program.
- The **comprehensive examination** requirement consists of two mandatory components:
  - An oral examination focused on clinical expertise (normally completed in the Fall session of Year 2); and
  - A research-focused grant proposal (normally completed in the Fall session of Year 2).
- A pass on both components is required for a student to continue on to PhD candidacy. Students who fail the oral exam will have the opportunity to retake the exam. Students who fail the grant proposal will have the opportunity to revise and resubmit. Students who fail either or both component(s) on the second attempt should consult the School of Graduate Studies' **Academic Appeals Policy**. If after the appeals process and second attempts at either or both component(s) result in a failure, the student will no longer be eligible to continue in the PhD program. Guidelines on the comprehensive requirement can be found in the **PCS Graduate Handbook**.
- **Thesis proposal**, normally approved prior to the start of Year 3 of the program.
- **Completed thesis**.
- Successful **defence of the thesis** at the Final Oral Examination.
- For students interested in acquiring additional clinical hours, the PhD program provides the following optional courses: CPS6999H and CPS7999H. Please note that optional courses for the PhD must be approved by the faculty supervisor, the DCT, and the Graduate Chair prior to course enrolment.
Supervisors will have annual meetings with students to assess academic progress and to develop plans of study. The DCT will also hold formal annual meetings with students to assess clinical and professional progress.

The program length is five years, which includes a pre-doctoral internship.

Program Length
5 years

Time Limit
6 years

Psychological Clinical Science: Counselling and Clinical Psychology MA, PhD; Field: Clinical Psychology Courses

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<td>Statistical Techniques I (Exclusion: JOI1287H Introduction to Applied Statistics.)</td>
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<td>Statistical Techniques II (Exclusion: JOI1288H Intermediate Statistics and Research Design.)</td>
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<td>CPS1301H</td>
<td>Cognitive-Affective Bases of Behaviour</td>
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<td>CPS1401H</td>
<td>Social and Interpersonal Bases of Behaviour</td>
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<td>CPS1501H</td>
<td>Personality</td>
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<td>CPS1601H</td>
<td>Psychopathology (Exclusion: APD3260H Psychodiagnostic Systems.)</td>
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<td>CPS1701H</td>
<td>Psychological Assessment I (Exclusion: APD3224H Individual Cognitive and Personality Assessment.)</td>
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<td>CPS1702H</td>
<td>Psychological Assessment II</td>
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<td>CPS1801H</td>
<td>Psychotherapy (Exclusion: APD1202Y Theories and Techniques of Counselling and Psychotherapy.)</td>
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<td>CPS1802H</td>
<td>Applied Interventions in Clinical Psychology (Exclusion: APD1203Y Practicum I: Interventions in Counselling Psychology.)</td>
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<tr>
<td>CPS1803H</td>
<td>Practicum in Psychological Interventions (Exclusion: APD1203Y Practicum I: Interventions in Counselling Psychology.)</td>
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APHD: Counselling and Clinical Psychology MA; Field: Clinical and Counselling Psychology

Master of Arts

Overview

The Counselling and Clinical Psychology program offers studies leading to the MA and PhD degrees. It is offered by the graduate Department of Applied Psychology and Human Development at the Ontario Institute for Studies in Education (OISE), St. George campus, and the graduate Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC).
This graduate program is intended for students seeking to pursue careers in research, teaching, and clinical practice. At the time of application, students will be required to identify a preference for a specific field as well as for a potential supervisor with whom they would work if admitted to the program.

The program has two fields:

- Clinical and Counselling Psychology, offered primarily by OISE
- Clinical Psychology, offered primarily by UTSC

The field in Clinical and Counselling Psychology is offered primarily by the OISE Department of Applied Psychology and Human Development. This field is based on a bio-psycho-social model with an emphasis on diversity. It shares an emphasis with Human Development. This field is based on a bio-psycho-social model with an emphasis on diversity. It shares an emphasis with Human Development.

Contact and Address

Web: www.oise.utoronto.ca/aphd

Department of Applied Psychology and Human Development
Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Program Description

This MA program is designed for applicants interested in working as researchers or practitioners in a variety of psychological and educational settings. This program enables students to apply for registration with the College of Psychologists of Ontario (CPO) as a Psychological Associate. It also fulfills the requirements of students who plan to apply to the PhD program, Clinical and Counselling Psychology field.

The MA is taken on a full-time or part-time basis. However, students in the part-time option will be required to complete one year of full-time study to fulfill their degree requirements.

For 2021-22 and further extension to the 2022-23 academic year, admissions to the part-time option have been administratively suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the third- and fourth-year levels).
- A standing equivalent to a University of Toronto A– or better in the final year.

Program Requirements

- Coursework. Students must complete a total of 4.5 FCEs as follows:
  o APD1203Y* Practicum I: Interventions in Counselling Psychology and Psychotherapy (1.0 FCE) (500 hours of practicum). MA students will attend a minimum of three colloquium presentations during their program, which partially fulfills the course requirements for APD1203Y*.
  o 0.5 elective FCE.
  o APD1208Y* Cognitive and Personality Theory and Assessment (1.0 FCE).
  o APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy (0.5 FCE).
  o APD1228H Couples Counselling (0.5 FCE) or APD1261H Group Work in Counselling and Psychotherapy (0.5 FCE) (or an equivalent course).
  o APD1283H Research Methods for Clinical and Counselling Psychology (0.5 FCE) (RM).
  o JOI1286H Intermediate Statistics and Research Design (RM) (0.5 FCE).
- Master's thesis.
- Full-time option: Full-time, on-campus study is required from September to April, which represents the Fall and Winter sessions. Normally, 1.5 FCEs are taken in each of the Fall and Winter sessions and a maximum of 1.0 FCE in the Summer session. Under this option, it is expected that all degree requirements will be completed within two years.
- Part-time option (for 2021-22 and further extension to the 2022-23 academic year, admissions to the part-time option have been administratively suspended): For this option, students can register as part-time students at the beginning of their program. However, they will be required to register as full-time students for one year of the program. In this option, students will normally take 1.0 FCE annually during the beginning of their program and 1.5 FCEs in each of the Fall and Winter sessions in their year of full-time study. Once they have begun their last required course, they must register annually and pay the part-time fees until all degree requirements have been completed. Under this option, it is expected that all degree requirements will be completed within two to three years, up to a maximum of six years.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
The Counselling and Clinical Psychology program offers studies leading to the MA and PhD degrees. It is offered by the graduate Department of Applied Psychology and Human Development at the Ontario Institute for Studies in Education (OISE), St. George campus, and the graduate Department of Psychological Clinical Science at the University of Toronto Scarborough (UTSC).

This graduate program is intended for students seeking to pursue careers in research, teaching, and clinical practice. At the time of application, students will be required to identify a preference for a specific field as well as for a potential supervisor with whom they would work if admitted to the program.

The program has two fields:
- Clinical and Counselling Psychology, offered primarily by OISE;
- Clinical Psychology, offered primarily by UTSC.

The field in Clinical and Counselling Psychology is offered primarily by the OISE Department of Applied Psychology and Human Development. This field is based on a bio-psycho-social model with an emphasis on diversity. It shares an emphasis with the Clinical Psychology field on assessment and the treatment of psychopathology in adults.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.
- An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the second-, third-, and fourth-year levels), with a standing equivalent to a University of Toronto A– or better in the final year.
- A University of Toronto MA degree in Clinical and Counselling Psychology with a grade of A– or better, or its equivalent.

Program Requirements

- **Coursework.** Students must complete a minimum of 5.5 FCEs as follows:
  - 2.5 FCEs in Counselling and Psychotherapy:
    - APD3215H Advanced Psychotherapy Seminar;
    - APD3217Y+ Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit; 600-hour practicum); and APD3268Y Internship in Clinical and Counselling Psychology (1,600-hour internship — arrangements must be made in consultation with the Director of Clinical Training). MA students will attend a minimum of three colloquium presentations during their program, which partially fulfills the course requirements for APD3268Y.
  - 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD3225H Assessment and Diagnosis of Personality and Psychopathology; and APD3260H Psychodiagnostic Systems.
  - 0.5 FCE in Supervision and Consultation:
    - APD3261H+ Clinical Supervision and Consultation Practicum.
  - 1.0 FCE in Advanced Research Methods:
    - APD3202H A Foundation of Program Evaluation in Social Sciences (RM).
    - An advanced-level statistics course (in consultation with supervisors). Courses can be drawn from those offered at OISE or other Faculties with the permission of the instructor.

Contact and Address

Web: [www.oise.utoronto.ca/aphd](http://www.oise.utoronto.ca/aphd)

Department of Applied Psychology and Human Development
Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada
• Comprehensive examination: In addition to normal course requirements, students will complete two comprehensive components. First, a manuscript for publication and presentation at a peer review conference, normally in Year 1 of the program. Second, students will be examined systematically in general psychology and in professional psychology. The examination will normally be taken at the end of Year 2 of full-time study.

• Doctoral dissertation: All students must develop, complete, and defend in a Doctoral Final Oral Examination a doctoral dissertation supervised by a full-time member of the Counselling and Clinical Psychology faculty. The content of such dissertation research may address theoretical issues applicable to clinical and counselling concerns and practice, relate to the development of programs in a variety of educational or applied settings, or in some other way contribute to the development and practice of clinical and counselling psychology.

• Students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.

• Students cannot transfer between the full-time and flexible-time PhD options.

Program Length

5 years

Time Limit

6 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

PhD Program (Flexible-Time)

For 2021-22 and further extension to the 2022-23 academic year, admissions to the flexible-time PhD option have been administratively suspended.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Applied Psychology and Human Development's additional admission requirements stated below.

• An appropriate bachelor's degree in psychology or any appropriate bachelor's degree that would contain the psychology requirement equivalent (defined as 6.0 full-course equivalents [FCEs] in psychology, including 0.5 FCE in research methods, 0.5 FCE in statistics, and at least 3.0 FCEs at the second-, third-, and fourth-year levels), with a standing equivalent to a University of Toronto A– or better in the final year.

• A University of Toronto MA degree in Clinical and Counselling Psychology with a grade of A– or better, or its equivalent.

• Applicants to the flexible-time PhD option are accepted under the same admission requirements as applicants to the full-time PhD option.

• Applicants must demonstrate that they are currently employed and are active professionals engaged in activities related to their proposed program of study.

Program Requirements

• Coursework. Students must complete a minimum of 5.5 FCEs as follows:

  o 2.5 FCEs in Counselling and Psychotherapy:
    - APD3215H Advanced Psychotherapy Seminar;
    - APD3217Y* Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit, 600-hour practicum); and APD3268Y Internship in Clinical and Counselling Psychology (1,600-hour internship — arrangements must be made in consultation with the Director of Clinical Training). PhD students will attend a minimum of six colloquium presentations during their program, which partially fulfills the course requirements for APD3268Y,

  o 1.0 FCE in Psychology Measurement/Assessment and Diagnosis:
    - APD3225H Assessment and Diagnosis of Personality and Psychopathology; and
    - APD3260H Psychodiagnostic Systems.

  o 0.5 FCE in Supervision and Consultation:
    - APD3261H* Clinical Supervision and Consultation Practicum.

  o 1.0 FCE in Advanced Research Methods:
    - APD3202H A Foundation of Program Evaluation in Social Sciences (RM).
    - An advanced-level statistics course (in consultation with supervisors). Courses can be drawn from those offered at OISE or other Faculties with the permission of the instructor.

  o 0.5 FCE in History and Systems Psychology:
    - APD3204H Contemporary History and Systems in Human Development and Applied Psychology.

• Comprehensive examination: In addition to normal course requirements, students will complete two comprehensive components. First, a manuscript for publication and presentation at a peer review conference, normally in Year 1 of the program. Second, students will be examined systematically in general psychology and in professional psychology. The examination will normally be taken at the end of Year 2 of full-time study.

• Doctoral dissertation: All students must develop, complete, and defend in a Doctoral Final Oral Examination a doctoral dissertation supervised by a full-time member of the Counselling and Clinical Psychology faculty. The content of such dissertation research may address theoretical issues applicable to clinical and counselling concerns and practice, relate to the development of programs in a variety of educational or applied settings, or in some other way contribute to the development and practice of clinical and counselling psychology.

• Students must register continuously until all degree requirements have been fulfilled. They must register full-time during the first four years and may continue as part-time thereafter, with their department's approval.
- Students cannot transfer between the full-time and flexible-time PhD options.

### Program Length

6 years

### Time Limit

8 years

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

## APHD: Counselling and Clinical Psychology
MA, PhD; Field: Clinical and Counselling Psychology Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services’ course schedule.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1202Y</td>
<td>Theories and Techniques of Counselling and Psychotherapy</td>
</tr>
<tr>
<td>APD1203Y*</td>
<td>Practicum I: Interventions in Counselling Psychology and Psychotherapy</td>
</tr>
<tr>
<td>APD1208Y*</td>
<td>Cognitive and Personality Theory and Assessment</td>
</tr>
<tr>
<td>APD1219H</td>
<td>Ethical Issues in Professional Practice in Psychology and Psychotherapy</td>
</tr>
<tr>
<td>APD1228H</td>
<td>Couples Counselling</td>
</tr>
<tr>
<td>APD1260H</td>
<td>Group Work in Counselling and Psychotherapy</td>
</tr>
<tr>
<td>APD1263H</td>
<td>Research Methods for Clinical and Counselling Psychology (RM)</td>
</tr>
<tr>
<td>APD1267H</td>
<td>Emotion-Focused Therapy (Co-requisite: APD1202Y. Exclusion: APD5004H.)</td>
</tr>
<tr>
<td>APD3202H</td>
<td>A Foundation of Program Evaluation in Social Sciences (RM)</td>
</tr>
<tr>
<td>APD3204H</td>
<td>Contemporary History and Systems in Human Development and Applied Psychology</td>
</tr>
<tr>
<td>APD3215H</td>
<td>Advanced Psychotherapy Seminar</td>
</tr>
<tr>
<td>APD3217Y*</td>
<td>Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit)</td>
</tr>
<tr>
<td>APD3225H</td>
<td>Assessment and Diagnosis of Personality and Psychopathology</td>
</tr>
<tr>
<td>APD3260H</td>
<td>Psychodiagnostic Systems</td>
</tr>
<tr>
<td>APD3261H*</td>
<td>Clinical Supervision and Consultation Practicum (Pre- or co-requisite: APD3217Y*.)</td>
</tr>
<tr>
<td>APD3268Y</td>
<td>Internship in Clinical and Counselling Psychology</td>
</tr>
<tr>
<td>APD5000H</td>
<td>Special Topics in Applied Psychology and Human Development: Master's Level</td>
</tr>
<tr>
<td>APD6000H</td>
<td>Special Topics in Applied Psychology and Human Development: Doctoral Level</td>
</tr>
<tr>
<td>JOI1287H</td>
<td>Introduction to Applied Statistics (RM)</td>
</tr>
<tr>
<td>JOI1288H</td>
<td>Intermediate Statistics and Research Design (RM)</td>
</tr>
<tr>
<td>JOI3048H</td>
<td>Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)</td>
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</table>

## Individual Reading and Research Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>APD2252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Master's Level</td>
</tr>
<tr>
<td>APD3252H</td>
<td>Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Psychology

Psychology: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Psychology

MA and PhD

Note: admissions to the MA program have been administratively suspended.

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Psychology, MA, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Psychology, MA, PhD
- Neuroscience
  - Psychology, MA, PhD
- Psychology and Engineering
  - Psychology, MA, PhD
- Sexual Diversity Studies
  - Psychology, MA, PhD
- Women's Health
  - Psychology, MA, PhD

Overview

Graduate training in Psychology stresses training in general experimental psychology. Areas of specialization include the following:

- Behavioural Neuroscience
- Perception, Cognition, and Cognitive Neuroscience
- Developmental
- Social and Personality.

Contact and Address

Web: www.psych.utoronto.ca/graduate
Email: psy.graduate@utoronto.ca
Telephone: (416) 978-3404

Graduate Program, Department of Psychology
University of Toronto
Sidney Smith Hall, 100 St. George Street, Room 4034
Toronto, Ontario M5S 3G3
Canada

Psychology: Graduate Faculty

Full Members

Addis, Donna Rose - PhD
Alain, Claude - BA, MA, PhD
Andersen, Judith - BSc, MA, PhD
Anderson, Nicole - BA, MA, PhD (Graduate Director)
Armstrong, Blair - BASc, MA, PhD
Bagby, Michael - BA, MA, PhD
Barense, Morgan - BA, PhD
Bernhardt-Walther, Dirk - BSc, MPH, PhD
Buchbaum, Bradley - BSc, PhD
Buchbaum, Daphna - AB, MA, MSC, PhD
Cant, Jonathan - BA, MS, MedScD
Carlson, Erika Nicole - BS, MA, MA, PhD
Chambers, Craig - BA, MA, MA, PhD
Chasteen, Alison - BA, PhD (Graduate Chair)
Cheung, Felix - AB, AM, PhD
Chung, Joanne Mee Hae - BA, BA, MA, PhD
Cirelli, Laura - BA, PhD
Cree, George Scott - BA, MA, PhD
Cunningham, William - BA, MPH, MS, MA, PhD
Cupchik, Gerald Chaim - BA, MA, PhD
Diaconescu, Andreea - PhD
Dion, Karen - BA, PhD
Einstein, Gillian - AB, PhD
Erb, Suzanne - BSc, MA, PhD
Farb, Norman - BA, MA, PhD
Ferber, Susanne - MPsy, PhD
Fletcher, Paul - BSc, DPhil
Fournier, Marc - BA, PhD
Frankland, Paul - MA, PhD
Fukuda, Keisuke - BS, MS, PhD
Gerlai, Robert - MSc, PhD
Goghani, Vina - BA, MA, PhD
Grady, Cheryl - BA, MA, PhD
Haley, David - BA, MA, PhD
Hewig, Charles - BA, PhD
Hendershot, Christian - PhD
Herrmann, Bjorn - PhD
Holmes, Melissa - BA, MA, PhD
Impett, Emily - BS, MS, PhD
Inbar, Yoel - PhD
Inzlicht, Michael - BSc, MSc, PhD
Ito Lee, Rutsuko - BA, PhD
Johnson, Elizabeth - BA, MA, PhD
Joordens, Steve - BA, MA, PhD
Josselyn, Sheena - MA, PhD
Kim, Junchul - BSc, MSc, PhD
Lee, Andy C.H. - BA, PhD
Lee, Spike - MS, PhD
Leonardelli, Geoffrey - BA, MA, PhD
Levine, Brian - BA, MA, PhD
Lockwood, Penelope - BA, MA, PhD
Mabbott, Donald - PhD
MacDonald, Geoffrey - BA, PhD (Associate Graduate Director)
MacDonald, Suzanne - PhD
Psychology: Psychology MA

Note: admissions to the Master of Arts program have been administratively suspended.

Master of Arts

Program Description

The MA program is designed to provide students with rigorous scientific training in experimental psychology. The program is one year in duration, during which time students obtain instruction in statistics and research design, and carry out a research project that culminates in a written thesis and oral examination. Students admitted to the MA program are expected to continue to the PhD program.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychology's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum A– average (or first-class standing) in the last two undergraduate years, and the equivalent of 6.0 full-course equivalents (FCEs) in psychology including statistics and adequate research performance.
- It is assumed that all students entering the MA program intend to continue in the PhD program.

Program Requirements

- Courses and individual research training leading to a thesis.
- **Coursework.** Students must successfully complete a total of 2.0 FCEs as follows:
  - PSY1000H Directed Studies to prepare for the MA thesis research (0.5 FCE)
  - PSY2001H Statistics I, experimental design and statistics (0.5 FCE)
  - two half-course Psychology electives (1.0 FCE total).
- **MA thesis.**

It is expected that following the MA year, students will proceed to the PhD program. To be eligible for admission, adequate research performance and at least an A– average are required.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time
Psychology: Psychology PhD

Doctor of Philosophy

Program Description

The principal aim of the PhD program is to equip students with the skills to carry out advanced research within experimental psychology, and to become independent research scientists. Students work closely with a faculty adviser to develop and conduct a specialized (often multidisciplinary) program of research that ultimately culminates in a written dissertation and final oral examination. Through additional coursework and research opportunities, students gain breadth in their knowledge base and skill set in experimental psychology. The program is designed to prepare students for careers in academia, or a variety of non-academic careers where rigorous and in-depth research training is required.

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychology’s additional admission requirements stated below.
- Appropriate University of Toronto master’s degree, or its equivalent from a recognized university, with a minimum A– average and adequate research performance.

Program Requirements

- **Coursework.** Students must successfully complete a total of 3.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: PSY2002H Statistics II, taken in Year 1.
  - 0.5 FCE: PSY3000H0 External Research Project, a research project course supervised by a faculty member other than the student’s PhD supervisor, completed during Years 1 and 2.
  - 0.5 FCE: PSY3001H0 Professional Psychology (Credit/No Credit), taken in two modules in Years 1 and 3.
  - 1.0 FCE in Psychology course electives. Of this requirement, 0.5 FCE can be achieved through two 0.25 FCE Psychology module electives (PSY3100H Psychological Science Skills).
  - 0.5 FCE: PSY4000H0 Doctoral Research Project, thesis proposal, and oral exam (examination in the student’s area of research).
- **PhD thesis.**
- Students may take other courses, but it is expected that the requirements will be completed in the first two years of the PhD program. Students admitted with a master’s degree from another university will normally be required to fulfill the PhD course requirements; however, exemptions may be granted by the Graduate Director of the Department of Psychology.

Program Length

4 years full-time

Time Limit

6 years full-time

Course that may continue over a program. The course is graded when completed.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Psychology’s additional admission requirements stated below.
- Appropriate University of Toronto bachelor’s degree, or its equivalent from a recognized university, with a minimum A– average and adequate research performance.
- Applicants with a master’s degree in Psychology or a cognate discipline will likely be admitted to the four-year PhD program, whereas students with a master’s degree in an unrelated discipline will be admitted to the direct-entry PhD option. Such admission decisions will be made by the Graduate Director.

Program Requirements

- **Coursework.** Students must successfully complete a total of 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: PSY1100H Foundational Research Project, a research project course supervised by the student's supervisor plus two other faculty members, completed during Years 1 and 2.
  - 0.5 FCE: PSY2001H Statistics I, an introductory statistics course taken in Year 1.
  - 0.5 FCE: PSY3000H0 External Research Project, a research project course supervised by a faculty member other than the student’s PhD supervisor, completed during Years 2 and 3.
  - 0.5 FCE: PSY3001H0 Professional Psychology (Credit/No Credit), taken in two modules in Years 1 and 3.
  - 2.0 FCEs in Psychology course electives. Of this requirement, 0.5 FCE can be achieved through two 0.25 FCE Psychology module electives (PSY3100H Psychological Science Skills).
  - 0.5 FCE: PSY4000H0 Doctoral Research Project, thesis proposal, and oral exam (examination in the student's area of research).
- **PhD thesis.**
• Students may take other courses, but it is expected that the requirements will be completed in the first three years of the PhD program. Students admitted with a master's degree from another university will normally be required to fulfil the PhD course requirements; however, exemptions may be granted by the Graduate Director of the Department of Psychology.

Program Length
5 years full-time

Time Limit
7 years full-time

Course that may continue over a program. The course is graded when completed.

Psychology: Psychology MA, PhD Courses
Not all courses are offered each year. See the current offerings.

MA and PhD Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSY1000H</td>
<td>Directed Studies</td>
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<tr>
<td>PSY1100H</td>
<td>Foundational Research Project</td>
</tr>
<tr>
<td>PSY1200H</td>
<td>Selected Topics in Psychology</td>
</tr>
<tr>
<td>PSY1210H</td>
<td>Selected Topics in Psychology</td>
</tr>
<tr>
<td>PSY1500H</td>
<td>Conceptual Bases of Psychology</td>
</tr>
<tr>
<td>PSY2001H</td>
<td>Statistics I</td>
</tr>
<tr>
<td>PSY2002H</td>
<td>Statistics II</td>
</tr>
<tr>
<td>PSY3000H</td>
<td>External Research Project</td>
</tr>
<tr>
<td>PSY3001H</td>
<td>Professional Psychology (Credit/No Credit)</td>
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<tr>
<td>PSY3100H</td>
<td>Psychological Science Skills</td>
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<tr>
<td>PSY4000H</td>
<td>Doctoral Research Project (Credit/No Credit)</td>
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Behavioural Neuroscience Core Courses

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSY5101H</td>
<td>Mechanisms of Behaviour</td>
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<tr>
<td>PSY5110H</td>
<td>Advanced Topics in Behavioural Neuroscience I</td>
</tr>
<tr>
<td>PSY5111H</td>
<td>Advanced Topics in Behavioural Neuroscience II</td>
</tr>
<tr>
<td>PSY5112H</td>
<td>Advanced Topics in Behavioural Neuroscience III</td>
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Developmental Core Courses

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<tr>
<td>PSY5303H</td>
<td>Cognitive Development</td>
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<tr>
<td>PSY5304H</td>
<td>Language Development</td>
</tr>
<tr>
<td>PSY5305H</td>
<td>Social Development</td>
</tr>
<tr>
<td>PSY5310H</td>
<td>Advanced Topics in Development I</td>
</tr>
<tr>
<td>PSY5311H</td>
<td>Advanced Topics in Development II</td>
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</tbody>
</table>

Perception/Cognition/Cognitive Neuroscience Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSY5201H</td>
<td>Audition</td>
</tr>
<tr>
<td>PSY5203H</td>
<td>Higher Cognition</td>
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<tr>
<td>PSY5204H</td>
<td>Attention</td>
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<tr>
<td>PSY5205H</td>
<td>Memory</td>
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<tr>
<td>PSY5210H</td>
<td>Advanced Topics in Perception I</td>
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<tr>
<td>PSY5211H</td>
<td>Advanced Topics in Perception II</td>
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<tr>
<td>PSY5212H</td>
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<tr>
<td>PSY5220H</td>
<td>Advanced Topics in Cognition I</td>
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<tr>
<td>PSY5221H</td>
<td>Advanced Topics in Cognition II</td>
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<tr>
<td>PSY5222H</td>
<td>Advanced Topics in Cognition III</td>
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Social and Personality Core Courses

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<th>Course Title</th>
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<td>PSY5402H</td>
<td>Personality</td>
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<tr>
<td>PSY5403H</td>
<td>Social Cognition</td>
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<tr>
<td>PSY5410H</td>
<td>Advanced Topics in Abnormal I</td>
</tr>
<tr>
<td>PSY5411H</td>
<td>Advanced Topics in Abnormal II</td>
</tr>
<tr>
<td>PSY5420H</td>
<td>Advanced Topics in Personality I</td>
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<tr>
<td>PSY5421H</td>
<td>Advanced Topics in Personality II</td>
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<tr>
<td>PSY5430H</td>
<td>Advanced Topics in Social Psychology I</td>
</tr>
<tr>
<td>PSY5431H</td>
<td>Advanced Topics in Social Psychology II</td>
</tr>
<tr>
<td>PSY5432H</td>
<td>Advanced Topics in Social Psychology III</td>
</tr>
<tr>
<td>PSY5433H</td>
<td>Advanced Topics in Social Psychology IV</td>
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## Cross-Listed Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>JNS1000Y</td>
<td>Fundamentals of Neuroscience: Systems and Behaviour</td>
</tr>
<tr>
<td>JPM1005Y</td>
<td>Behavioural Pharmacology</td>
</tr>
<tr>
<td>JPX1001Y</td>
<td>Parenting: Multidisciplinary Perspectives</td>
</tr>
</tbody>
</table>
Public Health Sciences

Public Health Sciences: Introduction

Faculty Affiliation

Public Health

Degree Programs

Public Health Sciences

MPH

- Fields:
  - Epidemiology;
  - Family and Community Medicine;
  - Indigenous Health;
  - Nutrition and Dietetics
    - Emphases:
      - Clinical Nutrition;
      - Management and Food Systems;
      - Public Health Nutrition
  - Occupational and Environmental Health
    - Emphases:
      - Occupational Hygiene;
      - Environmental Public Health
  - Social and Behavioural Health Sciences

MSc

- Field:
  - Biostatistics
    - Emphasis: Artificial Intelligence and Data Science

DrPH

PhD

- Fields:
  - Biostatistics;
  - Epidemiology
    - Emphasis: Artificial Intelligence and Data Science
  - Occupational and Environmental Health;
  - Social and Behavioural Health Sciences

Bioethics

MHSCh

Community Health

MScCH

- Fields:
  - Addictions and Mental Health;
  - Family and Community Medicine;
  - Health Practitioner Teacher Education;
  - Occupational Health Care;
  - Wound Prevention and Care

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Public Health Sciences, MPH, MSc, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Public Health Sciences, MPH, MSc, PhD
- Bioethics
  - Public Health Sciences, MPH, MSc, PhD
- Community Development
  - Public Health Sciences, MPH
- Development Policy and Power
  - Public Health Sciences, MPH
- Environment and Health
  - Community Health, MScCH
  - Public Health Sciences, MPH, PhD
- Food Studies
  - Public Health Sciences, PhD
- Global Health (U of T Global Scholar)
  - Public Health Sciences, MPH, MSc (thesis only), MScCH, PhD
- Health Services and Policy Research
  - Public Health Sciences, PhD
- Indigenous Health
  - Public Health Sciences, MPH, PhD
- Neuroscience
  - Bioethics, MHSCh
  - Community Health, MScCH
  - Public Health Sciences, MPH, MSc, PhD
- Public Health Policy
  - Public Health Sciences, MPH, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Community Health, MScCH
  - Public Health Sciences, MPH, MSc, PhD
- Sexual Diversity Studies
  - Public Health Sciences, MPH, MSc, PhD
- Women and Gender Studies
  - Public Health Sciences, MPH, PhD
- Women's Health
  - Public Health Sciences, MPH, PhD

Overview

The Dalla Lana School of Public Health is an internationally recognized community of researchers, teachers, students, practitioners, policy makers, and citizens creating new knowledge, educating change makers, advancing practice, and guiding the way to better, more equitable outcomes in population health and health systems — locally, nationally, and globally.

The Graduate Department of Public Health Sciences in the Dalla Lana School of Public Health enrolls almost 500 graduate students in its master's and doctoral degree programs. In addition, the school has more than 40 postgraduate students in...
its two Royal College Residency programs: Public Health and Preventive Medicine and Occupational Medicine. The school is also engaged in teaching at the undergraduate level in the Faculty of Medicine, Faculty of Arts and Science, Bloomberg Faculty of Nursing, and University of Toronto Scarborough (UTSC).

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Associate Members

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Hobin, Erin - BEd, BBA, MA, PhD
Holmes, Candice - BSc, MHSc, MD
Hu, Pingzhao - PhD
Hunt, Cindy L. - BSc, MPH, DPH
Husbands, Winston - BA, MPH, PhD
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<tr>
<th>Name</th>
<th>Degrees</th>
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<tr>
<td>Jetha, Arif</td>
<td>BA, MSc, PhD</td>
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<td>Johnson, Ian Lindsay</td>
<td>BSc, MSc, MD</td>
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<td>Johnstone, Jennie</td>
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<td>MPH, MS, MD</td>
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<td>Mohammed, Shan</td>
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<td>BPHE, MSc, PhD</td>
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<td>Morisano, Dominique</td>
<td>-PhD</td>
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<td>Morris, Shaun</td>
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<td>Nayer, Maria</td>
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<td>Nemethy, Kataryna</td>
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<td>Nnorom, Onyenyechukwu</td>
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<td>Norman, Cameron</td>
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<td>Nowgesic, Earl</td>
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<td>Ondrusak, Nancy</td>
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<td>Ofner, Marianna</td>
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<td>Pakes, Barry</td>
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<td>Paneduro, Denise</td>
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<td>Parthimos, Margie</td>
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<td>BA, MPsy, MPsy, PhD</td>
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<td>Perez-Brumer, Amaya</td>
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<td>Popova, Svetlana</td>
<td>MPH, MDS, DSW, MedScD</td>
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<td>Poulin-Costello, Melanie</td>
<td>BM, MS</td>
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<td>Prowse, Rachel J.</td>
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<td>Quiñonez, Carlos R.</td>
<td>MSc, DMD, PhD</td>
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<tr>
<td>Rachlis, Beth Stephanie</td>
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<td>Rea, Elizabeth</td>
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<td>Redditt, Vanessa</td>
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<td>Reel, Kevin</td>
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<td>Richardson, Denyse</td>
<td>MEd, MD</td>
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<td>Richmond, Sarah Ann</td>
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<td>Ritchie, Amanda Joan</td>
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<tr>
<td>Robertson, Jamie</td>
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<td>Rocha, Cecilia</td>
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Public Health Sciences: Public Health Sciences MPH

Master of Public Health

Program Description

The MPH degree is designed to prepare the next generation of public health professionals and is aimed at students interested in professional and/or research careers in the community, academic, public, or private sectors. Applicants apply and may be admitted to one of the following fields:

- Epidemiology
- Family and Community Medicine
- Indigenous Health
- Nutrition and Dietetics
- Occupational and Environmental Health
- Social and Behavioural Health Sciences

The program may be taken on a full-time or part-time basis.

Field: Epidemiology

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.
- At least one course in undergraduate statistics.
- Relevant work or volunteer experience.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 1.0 FCE in research methods: CHL5401H Epidemiologic Methods I and CHL5402H Epidemiologic Methods II
  - 1.0 FCE in biostatistics: CHL5201H Biostatistics I and CHL5202H Biostatistics II
  - 1.5 FCEs in epidemiology: CHL5405H Health Trends and Surveillance, CHL5418H Scientific Overview in Epidemiology, and CHL5426H Population Perspectives for Epidemiology
  - 0.5 FCE in public health policy: CHL5300H Public Health Policy
  - Minimum 1.0 FCE: practicum placement
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

- Full-time students normally require longer to complete the program, including time spent in the practicum placement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 12 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Field: Family and Community Medicine

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.
- At least one course in undergraduate statistics.
- Relevant work or volunteer experience.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 0.5 FCE: CHL5601H Appraising and Applying Evidence to Assist Clinical Decision-Making
  - 1.0 FCE: CHL5603Y Social, Political, and Scientific Issues in Family Medicine
  - 0.5 FCE: CHL5605H Research Issues in Family Medicine/Primary Care or an equivalent research course, subject to approval
  - 1.0 FCE: CHL5607H Teaching and Learning by the Health Professions: Principles and Theories and CHL5608H Teaching and Learning by the Health Professions: Practical Issues and Approaches
  - 0.5 FCE: CHL5613H Leading Improvement in the Quality of Health Care for Community Populations
  - 0.5 FCE: CHL5622H Patient-Related Health Care and Public Policy in Canada
  - Minimum 1.0 FCE: practicum placement
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

- Full-time students normally require longer to complete the program, including time spent in the practicum placement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 12 sessions part-time
Field: Family and Community Medicine  
(Advanced-Standing Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.
- Completion in good standing of the public health curriculum of an accredited Canadian medical school and/or meeting the required examinable competencies of the Medical Council of Canada.

Program Requirements

- Completion of 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 1.0 FCE core course: CHL5603Y Social, Political, and Scientific Issues in Family Medicine
  - 0.5 FCE core course: CHL5622H Patient-Related Health Care and Public Policy in Canada
  - 0.5 FCE core course: CHL5624H Historical, Ethical, and Philosophical Foundations of Public Health
  - 0.5 FCE research methods course selected from the following list:
    - CHL5601H Appraising and Applying Evidence to Assist Clinical Decision-Making
    - CHL5605H Research Issues in Family Medicine/Primary Care
    - CHL5613H Leading Improvement in the Quality of Health Care for Community Populations
    - CHL5616H Applied Survey Methods for Health Care Professionals
  - 0.5 FCE: CHL6013H Required MPH Advanced Standing Practicum
  - 1.5 FCEs in elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Program Length

3 sessions full-time (typical registration sequence: F/W/S); 6 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Field: Indigenous Health

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.
- At least one course in undergraduate statistics.
- Relevant work or volunteer experience.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 0.5 FCE: CHL5300H Public Health Policy
  - 1.0 FCE in research methods: CHL5220H and CHL5811H or approved equivalents
  - 0.5 FCE: CHL5521H Indigenous Practicum Preparation
  - 0.5 FCE: CHL5522H Indigenous Food Systems, Environment, and Health
  - 0.5 FCE: CHL5523H Indigenous Health and Social Policy
  - 0.5 FCE: CHL5524H: Indigenous Health Theory and Methods
  - 0.5 FCE: CHL5801H Health Promotion 1 or CHL5105H Social Determinants of Health
  - Minimum 1.0 FCE: practicum placement
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  - Full-time students normally require longer to complete the program, including time spent in the practicum placement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 12 sessions part-time

Time Limit

3 years full-time; 6 years part-time
Field: Nutrition and Dietetics

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below and may be considered for the advanced-standing option.
- Appropriate bachelor's degree in food and nutrition (or equivalent) from a recognized university with a minimum mid-B average in the final year.
- Membership in a provincial dietetics regulatory body or equivalent in the home country. Those planning to practise in Canada must be eligible for membership in a provincial regulatory body of dietetics.
- Five years of professional work experience in clinical, community, administrative, or public health dietetics.
- At least one course in undergraduate statistics.
- Relevant work or volunteer experience.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 0.5 FCE: CHL5300H Public Health Policy
  - 0.5 FCE in quantitative research methods: CHL5220H Introduction to Quantitative Research or an approved equivalent
  - 0.5 FCE: CHL5654H Nutrition Programs and Strategies
  - 0.5 FCE: CHL5811H Introduction to Qualitative Research
  - 2.5 FCEs in foundations of practice for students who have not completed dietetic practical training (dietetic internship): CHL5650H, CHL5651H, CHL5652H, and CHL5656Y
  - 0.5 FCE in nutrition science
  - Minimum 1.0 FCE: practicum placement
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- Full-time students normally require longer to complete the program, including time spent in the practicum placement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
12 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Field: Nutrition and Dietetics (Advanced-Standing Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below and may be considered for the advanced-standing option.
- Appropriate bachelor's degree in food and nutrition (or equivalent) from a recognized university with a minimum mid-B average in the final year.
- Membership in a provincial dietetics regulatory body or equivalent in the home country. Those planning to practise in Canada must be eligible for membership in a provincial regulatory body of dietetics.
- Five years of professional work experience in clinical, community, administrative, or public health dietetics.
- At least one course in undergraduate statistics.

Program Requirements

- Completion of 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: CHL5004H Introduction to Public Health Sciences
  - 0.5 FCE in public health policy: CHL5300H Public Health Policy or CHL5622H Patient-Related Health Care and Public Policy in Canada
  - 1.0 FCE in research methods: CHL5220H Introduction to Quantitative Research, or an approved equivalent, and CHL5811H Introduction to Qualitative Research
  - 0.5 FCE in population or public health nutrition from the following list:
    - CHL5522H Indigenous Food Systems, Environment, and Health
    - CHL5653H Community Nutrition
    - CHL5654H Nutrition Programs and Strategies
    - NFS1201H Public Health Nutrition
    - NFS1212H Regulation of Food, Composition, Health Claims, and Safety
    - other courses approved by the Program Director
  - 0.5 FCE in nutrition science from the following list:
    - NFS1220H Clinical Nutrition
    - NFS1223H Dietary Carbohydrate and Glycaemic Index in Health and Disease
    - NFS1484H Advanced Nutrition
    - other courses approved by the Program Director
  - 0.5 FCE: CHL6013H Required MPH Advanced Standing Practicum
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Program Length

3 sessions full-time advanced standing (typical registration sequence: F/W/S);
9 sessions part-time advanced standing

Time Limit

3 years full-time;
6 years part-time

\[ \text{Course that may continue over a program. The course is graded when completed.} \]
Emphases in the MPH Program

Students in the Nutrition and Dietetics field of study may complete an emphasis by completing 1.0 full-course equivalent (FCE) in the given area. The emphasis requirements will also count toward their 10.0 FCE degree program requirements.

Emphasis: Clinical Nutrition

- 0.5 FCE: complete a four-week Clinical Nutrition practicum in a tertiary-care clinical nutrition setting, in addition to the standard practicum requirements for the field.
- 0.5 FCE from the following list:
  - NFS1220H Clinical Nutrition
  - CHL5610H Theory and Practice of Behaviour Change in Health Professional Settings.
- A relevant research assignment for an appropriate agency focussed on clinical nutrition as part of CHL5656Y Nutrition and Dietetics Culminating Project, to be approved by the program director or course instructor.

Emphasis: Management and Food Systems

- 0.5 FCE: complete a four-week Management and Food Systems practicum in a management and food provision setting, in addition to the standard practicum requirements for the field.
- 0.5 FCE: graduate-level course in management or food systems to be approved by the program director and course instructor.
- A relevant research assignment for an appropriate agency focussed on management of food provision and food systems as part of CHL5656Y Nutrition and Dietetics Culminating Project, to be approved by the program director or course instructor.

Emphasis: Public Health Nutrition

- 0.5 FCE: complete a four-week Public Health Nutrition practicum in a regional, provincial, or federal public health agency setting, in addition to the standard practicum requirements for the field.
- 0.5 FCE: NFS1201H Public Health Nutrition.
- A relevant research assignment for an appropriate agency focussed on public health nutrition as part of CHL5656Y Nutrition and Dietetics Culminating Project, to be approved by the program director or course instructor.

Field: Occupational and Environmental Health

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Appropriate bachelor's degree from a recognized university with a minimum mid-B average in the final year.
- At least one course in undergraduate statistics.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F); 12 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Emphasizes in the MPH Program

Students in the Occupational and Environmental Health field of study must complete an emphasis by completing 3.0 full-course equivalents (FCEs) in the given area. The emphasis requirements will also count toward their 10.0 FCE degree program requirements.

Emphasis: Occupational Hygiene

- 0.5 FCE: CHL5410H Occupational Epidemiology
- 0.5 FCE: CHL5902H Advanced Occupational Hygiene
- 0.5 FCE: CHL5911H Occupational and Environmental Hygiene II
- 0.5 FCE: CHL5915H Control of Occupational Hazards
- 0.5 FCE: CHL5917H Concepts in Safety Management
- 0.5 FCE: CHL5918H Biological Hazards in the Workplace and Community
Emphasis: Environmental Public Health

- 0.5 FCE: CHL5201H Biostatistics I
- 0.5 FCE: CHL5413H Public Health Sanitation
- 0.5 FCE: CHL5416H Environmental Epidemiology
- 0.5 FCE: CHL5903H Environmental Health
- 0.5 FCE: CHL5921H Protecting the Public from Air Pollution
- 0.5 FCE: CHL5950H Special Topics in Occupational and Environmental Health or equivalent

Field: Social and Behavioural Health Sciences

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Appropriate bachelor’s degree from a recognized university with a minimum mid-B average in the final year.
- At least one course in undergraduate statistics.
- Relevant work or volunteer experience.

Program Requirements

- Completion of 10.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE core course: CHL5004H Introduction to Public Health Sciences
  - 1.0 FCE: CHL5801H Health Promotion 1 and CHL5803H Health Promotion 2
  - 0.5 FCE: CHL5105H Social Determinants of Health
  - 0.5 FCE: CHL5110H Theory and Practice of Program Evaluation
  - 0.5 FCE: CHL5300H Public Health Policy
  - 1.5 FCEs in research methods: CHL5201H Biostatistics I, CHL5401H Epidemiologic Methods I, and CHL5811H Introduction to Qualitative Research or approved equivalents
  - Minimum 1.0 FCE: practicum placement
  - Elective courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- Full-time students normally require longer to complete the program, including time spent in the practicum placement.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
12 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Public Health Sciences: Public Health Sciences MSc

Master of Science

Program Description

The MSc degree is designed for students interested in research and academic careers involving the development and application of statistical methodology to further our understanding of data arising in the health sciences. The program is offered in the field of Biostatistics, both full-time and part-time.

Field: Biostatistics

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Appropriate bachelor’s degree from a recognized university with a minimum mid-B average in the final year.

Program Requirements

Two options are available:

- Thesis option comprising 4.0 full-course equivalents (FCEs) and a thesis.
- Coursework-only option comprising 5.0 FCEs.

Thesis MSc

- Completion of 4.0 FCEs as follows:
  - CHL5004H, CHL5207Y0, CHL5209H, CHL5210H, and CHL5250H
  - CHL5226H or STA2112H (Mathematical Statistics I)
  - CHL5223H or STA2212H (Mathematical Statistics II)
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- A thesis written under the supervision of a thesis committee. An oral defence of the thesis is required.

Coursework-Only MSc

- Completion of 5.0 FCEs as follows:
  - CHL5004H, CHL5207Y, CHL5209H, CHL5210H, and CHL5250H
  - CHL5226H or STA2112H (Mathematical Statistics I)
  - CHL5223H or STA2212H (Mathematical Statistics II)
  - 1.0 FCE in electives from an approved list of courses
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
Program Length

3 sessions full-time (typical registration sequence: F/W/S); 9 sessions part-time

Time Limit

3 years full-time; 6 years part-time

Course that may continue over a program. The course is graded when completed.

Emphasis in the MSc Program

Students in the Biostatistics (Coursework-Only) field of study have the option to complete an emphasis by completing appropriate coursework in a given area. The emphasis requirements will also count toward their 5.0 full-course equivalent (FCE) field requirement.

Emphasis: Artificial Intelligence and Data Science

- Students must complete 1.0 FCE from the following list:
  - CHL5212H Predictive Modelling in the Health Sciences
  - CHL5213H Methods for Analysis of Microbiome Data
  - CHL5229H Modern Biostatistics and Statistical Learning
  - CHL5230H Applied Machine Learning for Health Data.
- Students must complete a practical component in the area of Artificial Intelligence and Data Science through CHL5207Y Laboratory in Statistical Design and Analysis.

Course that may continue over a program. The course is graded when completed.

Public Health Sciences: Public Health Sciences DrPH

Doctor of Public Health

Program Description

The Doctor of Public Health (DrPH) program advances public health education, addressing evaluation and translation of evidence in policy and practice decision-making contexts. The doctoral professional program is based on existing areas of faculty expertise within the Dalla Lana School of Public Health (including Public Health Sciences and the Institute of Health Policy, Management and Evaluation). Additionally, the program is the first of its kind in English Canada and will further raise the profile of the public health workforce.

The focus of the program is to contribute to emerging needs in public health to address increasingly complex issues. Graduates will develop skills and knowledge in four major competency areas, as defined by the Council on Education for Public Health: (1) Data & Analysis; (2) Leadership, Management, Governance; (3) Policy & Programs; and (4) Education & Workforce Development. The DrPH will allow graduates to take on advanced roles (e.g., leadership, knowledge translation) in public health policy and practice settings.

The program is offered on a full-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School's additional admission requirements stated below.
- Master's degree in a relevant public health sciences or health services-related discipline such as a Master of Public Health, Master of Science (with a health-related thesis), Master of Health Administration, or Master of Health Science with an average grade equivalent to a B+ or better.
- At least five years of mid-level management experience in a relevant field or organization.
- Candidates with less than five years of relevant experience may also be considered in exceptional circumstances.
- At least two letters of reference.

Program Requirements

- Coursework. Completion of 6.5 full-course equivalents (FCEs) as follows:
  - Year 1 (3.5 FCEs):
    - 0.5 FCE: CHL4001H Contemporary Approaches to Population Health and Health Equity
    - 0.5 FCE: CHL5005H Public Health Research (Credit/No Credit)
    - 0.5 FCE: CHL5624H Historical, Ethical, and Philosophical Foundations of Public Health
    - 0.5 FCE: one research methods course, for example:
      - HAD5763H Advanced Methods in Health Services Research
      - HAD6501H Introduction to Methods for Health Professions Education Research
    - 0.5 FCE: CHL4003H Leading High-Performing Health Systems
    - 0.5 FCE: CHL4002H Global Health Policy
    - Applied Research Project
  - Year 2 (2.5 FCEs):
    - 0.5 FCE: CHL4005H Governance and Financial Leadership
    - 0.5 FCE: CHL5132H Population Health Intervention Research (PHIR)
    - 0.5 FCE: HAD5778H Comparative Health Systems and Policy
    - 1.0 FCE: two elective courses
    - Written comprehensive examination in public health sciences
  - Years 3 and 4 (0.5 FCE):
    - 0.5 FCE: HAD5765H Case Studies in Health Policy
Writing of a doctoral thesis under the supervision of an approved thesis committee (supervisor with an appointment in Public Health Sciences plus two additional faculty members)

A final oral defence of the thesis before an examination committee approved by the School of Graduate Studies

Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.

Program Length

4 years

Time Limit

6 years

Course that may continue over a program. The course is graded when completed.

Public Health Sciences: Public Health Sciences PhD

Doctor of Philosophy

Program Description

The PhD program prepares students for research and academic careers. Fieldwork and research enhance theoretical studies and expose students to the full breadth and depth of their public health science disciplines. Applicants apply and may be admitted to one of the following fields:

- Biostatistics
- Epidemiology
- Occupational and Environmental Health
- Social and Behavioural Health Sciences

The PhD program may be completed on a full-time or flexible-time basis.

With the approval of the graduate chair, some applicants may be admitted to a flexible-time PhD program. This program will benefit mature students with career obligations, and applicants must demonstrate that they are practising professionals. Degree requirements for the flexible-time program are identical to those for the full-time PhD program. Students are required to register full-time for the first four years of their program, after which they may register part-time. A plan of study and research activities will be negotiated at initial registration, to be reviewed and updated annually.

Field: Biostatistics

PhD Program (Full-Time and Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Master’s degree in a public health science-related discipline from a recognized university, with a minimum A– standing.
- Demonstrated educational and/or professional experience that indicates a capacity to undertake research-oriented doctoral studies.

Program Requirements

- Coursework. Completion of 5.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: CHL5005H Public Health Research
  - 1.0 FCE: CHL5208Y Advanced Laboratory in Statistical Design and Analysis
  - 0.5 FCE: CHL5209H Survival Analysis I
  - 0.5 FCE: CHL5210H Categorical Data Analysis
  - 0.5 FCE: CHL5250H+ Special Topics in Biostatistics (seminar)
  - 0.5 FCE: CHL5260H Doctoral Seminar Series in Biostatistics
  - 1.0 FCE: STA2112H and STA2212H Mathematical Statistics
  - 0.5 FCE: elective course that relates to the student’s area of study
  - Students who have taken their MSc in the department may have taken some or all of these courses already. In this case, their program of study will be designed with consultation of the program director at the time of admission.
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  - Demonstrated proficiency in statistics or research methods.
  - A written qualifying examination in biostatistics.
  - A departmental defence of the dissertation proposal.
  - Writing of a PhD dissertation under the supervision of an approved dissertation committee (supervisor plus two additional faculty members).
  - A departmental defence of the dissertation prior to the SGS Final Oral Examination.
  - A final oral defence of the dissertation before an examination committee approved by the School of Graduate Studies.

Program Length

4 years full-time; 6 years flexible-time

Time Limit

6 years full-time; 8 years flexible-time
Field: Epidemiology

PhD Program (Full-Time and Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Master’s degree in a public health science-related discipline from a recognized university, with a minimum A– standing.
- Demonstrated educational and/or professional experience that indicates a capacity to undertake research-oriented doctoral studies.

Program Requirements

- **Coursework.** Completion of 4.0 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: CHL5005H Public Health Research
  - 1.0 FCE: CHL5404H and CHL5408H Research Methods
  - 1.0 FCE: CHL5406H and CHL5424H Quantitative Methods
  - 0.5 FCE: CHL5423H0 Doctoral Seminar in Epidemiology
  - 0.5 FCE: CHL5428H Epidemiological Methods for Causal Mediation Analyses
  - 0.5 FCE: elective courses that relate to the student’s area of study
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  - Demonstrated proficiency in statistics or research methods.
  - A written qualifying examination in epidemiology.
  - A departmental defence of the dissertation proposal.
  - Writing of a PhD dissertation under the supervision of an approved dissertation committee (supervisor plus two additional faculty members).
  - A departmental defence of the dissertation prior to the SGS Final Oral Examination.
  - A final oral defence of the dissertation before an examination committee approved by the School of Graduate Studies.

Program Length

4 years full-time; 6 years flexible-time

Time Limit

6 years full-time; 8 years flexible-time

Emphasis in the PhD Program

Students in the **Epidemiology field** of study have the option to complete an emphasis by completing appropriate coursework in a given area. The emphasis requirements will also count toward, but may exceed, the 4.0 full-course equivalent (FCE) field requirement.

Emphasis: Artificial Intelligence and Data Science

- Students must complete 1.5 FCEs from the following list:
  - CHL5212H Predictive Modelling in the Health Sciences
  - CHL5213H Methods for Analysis of Microbiome Data
  - CHL5229H Modern Biostatistics and Statistical Learning
  - CHL5230H Applied Machine Learning for Health Data
  - CHL5429H Advanced Analytic Methods for Bias in Epidemiologic Studies
  - CHL3020H Ethics and Artificial Intelligence for Health
  - HAD5306H Introduction to Health Services Research and the Use of Health Administrative Data
  - MHI2012H Introduction to Big Data for Health: Foundations and Methodologies
  - Other course(s) approved by the Program Director.

Field: Occupational and Environmental Health

PhD Program (Full-Time and Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Master’s degree in a public health science-related discipline from a recognized university, with a minimum A– standing.
- Demonstrated educational and/or professional experience that indicates a capacity to undertake research-oriented doctoral studies.

Program Requirements

- **Coursework.** Completion of 3.5 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: CHL5005H Public Health Research
  - 0.5 FCE in either occupational or environmental health
  - 1.0 FCE in advanced research methods (including biostatistics)
  - 0.5 FCE: doctoral seminar in occupational and environmental health
  - 1.0 FCE: elective courses that relate to the student’s area of study
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
  - Demonstrated proficiency in statistics or research methods.
  - A written qualifying examination in occupational and environmental health.
**Program Length**

4 years full-time; 6 years flexible-time

**Time Limit**

6 years full-time; 8 years flexible-time

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**Field: Social and Behavioural Health Sciences**

**PhD Program (Full-Time and Flexible-Time)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Master's degree in a public health science-related discipline from a recognized university, with a minimum A– standing.
- Demonstrated educational and/or professional experience that indicates a capacity to undertake research-oriented doctoral studies.

**Program Requirements**

- **Coursework.** Completion of 3.5 full-course equivalents (FCEs) as follows:
  - 0.5 FCE: CHL5005H Public Health Research
  - 0.5 FCE: CHL5101H Social and Behavioural Theory and Health
  - 0.5 FCE: CHL5102H Social and Political Forces in Health
  - 1.0 FCE in approved research methods courses
  - 1.0 FCE: elective courses that relate to the student’s area of study
  - Students may elect to take up to 0.5 FCE on a Credit/No Credit basis. See the list of Credit/No Credit-eligible courses below.
- Demonstrated proficiency in **statistics or research methods**.
- A written **qualifying examination** in social and behavioural health sciences.
- A departmental defence of the **dissertation proposal**.
- Writing of a **PhD dissertation** under the supervision of an approved dissertation committee (supervisor plus two additional faculty members).
- A **departmental defence** of the dissertation prior to the SGS Final Oral Examination.

- **A final oral defence** of the dissertation before an examination committee approved by the School of Graduate Studies.

**Public Health Sciences: Bioethics MHSc**

**Master of Health Science**

**Program Description**

The MHSc in Bioethics is a two-year, course-based program with no thesis requirement. It is conducted in modular format to allow high-achieving professionals to earn a master’s degree without interrupting their careers. The program’s interactive, problem-based learning approach provides students with knowledge and skills that can be applied to a variety of health, health care, and health research contexts. Expert faculty and guest lecturers help students bring theory and practice together to address real-world ethical challenges. Students interested in a research-stream program should consider the Collaborative Specialization in Bioethics.

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Dalla Lana School’s additional admission requirements stated below.
- Normally, an appropriate bachelor's degree and a recognized degree in one of the health sciences (e.g., MD, BScN, BScOT, BScPT, BSW) or equivalent with a minimum mid-B average in the final year. Applicants from other disciplines are considered on an individual basis.
- Potential that the applicant will provide significant bioethics leadership in his or her home institution or local community upon completion of the MHSc in Bioethics.
Program Requirements

• This course-based program is offered in modular format in 24 two-day Thursday/Friday blocks from September to April, normally over two years; certain international students may complete all coursework in one academic year. The program does not include a distance-learning option.
• A major paper of publishable quality on a topic of the student's choice.
• Students must complete 8.5 full-course equivalents (FCEs), including a 1.0 FCE practicum as outlined below.
• Courses as outlined below.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W)

Time Limit

3 years full-time

Required Courses

Courses are restricted to students officially enrolled in the MHSc in Bioethics and the Collaborative Specialization in Bioethics, except where noted.

Year 1

• CHL3001Y Core Topics in Bioethics
• CHL3003Y Empirical Approaches in Bioethics
• CHL3005H Legal Approaches to Bioethics
• HAD5771H Resource Allocation Ethics
• PHL2146Y Topics in Bioethics

Year 2

• CHL3002Y Teaching Bioethics
• CHL3004Y Ethics and Health Institutions
• CHL3006H Writing in Bioethics
• CHL3008Y Applied Learning in Bioethics (practicum)
• CHL3051H Research Ethics
• CHL3052H Practical Bioethics (capstone course)

0 Course that may continue over a program. The course is graded when completed.
### Program Length

3 sessions full-time (typical registration sequence: F/W/S); 9 sessions part-time

### Time Limit

3 years full-time; 6 years part-time

### Public Health Sciences: Public Health Sciences MPH, MSc, DrPh, PhD, Community Health MScCH Courses

#### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
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<tbody>
<tr>
<td>CHL5004H</td>
<td>Introduction to Public Health Sciences</td>
</tr>
<tr>
<td>CHL5005H</td>
<td>Public Health Research (Credit/No Credit)</td>
</tr>
</tbody>
</table>

Students in the Master of Public Health, Master of Science, Master of Science in Community Health, Doctor of Philosophy, and Doctor of Public Health may elect to be assessed on a Credit/No Credit basis in courses marked by the symbol ♬ up to a total of 0.5 FCE.

#### Biostatistics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>CHL5201H</td>
<td>Biostatistics I</td>
</tr>
<tr>
<td>CHL5202H</td>
<td>Biostatistics II</td>
</tr>
<tr>
<td>CHL5203H</td>
<td>Survey Design and Social Research Methods in Public Health</td>
</tr>
<tr>
<td>CHL5207Y</td>
<td>Laboratory in Statistical Design and Analysis</td>
</tr>
<tr>
<td>CHL5208Y</td>
<td>Advanced Laboratory in Statistical Design and Analysis</td>
</tr>
<tr>
<td>CHL5209H</td>
<td>Survival Analysis I</td>
</tr>
<tr>
<td>CHL5210H</td>
<td>Categorical Data Analysis</td>
</tr>
<tr>
<td>CHL5212H</td>
<td>Predictive Modelling in the Health Sciences</td>
</tr>
<tr>
<td>CHL5213H</td>
<td>Methods for Analysis of Microbiome Data</td>
</tr>
<tr>
<td>CHL5220H</td>
<td>Introduction to Quantitative Research</td>
</tr>
<tr>
<td>CHL5221H</td>
<td>Introduction to Qualitative Research</td>
</tr>
<tr>
<td>CHL5222H</td>
<td>Analysis of Correlated Data</td>
</tr>
<tr>
<td>CHL5223H</td>
<td>Applied Bayesian Methods</td>
</tr>
<tr>
<td>CHL5224H</td>
<td>Modern Statistical Genetics</td>
</tr>
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</table>

#### Clinical Public Health

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>CHL5630Y</td>
<td>Wound Prevention and Care</td>
</tr>
<tr>
<td>CHL5631H</td>
<td>Integrating Public Health and Clinical Care: The Case of TB</td>
</tr>
<tr>
<td>CHL5632H</td>
<td>Application of Implementation Science in Global Health (prerequisite: one or more qualitative or quantitative research methods course, or one program evaluation course)</td>
</tr>
<tr>
<td>CHL5633H</td>
<td>Planetary and Global Health Ethics</td>
</tr>
</tbody>
</table>

#### Epidemiology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>CHL5401H</td>
<td>Epidemiologic Methods I</td>
</tr>
<tr>
<td>CHL5402H</td>
<td>Epidemiologic Methods II</td>
</tr>
<tr>
<td>CHL5403H</td>
<td>Epidemiology of Non-Communicable Diseases</td>
</tr>
<tr>
<td>CHL5404H</td>
<td>Research Methods I</td>
</tr>
<tr>
<td>CHL5405H</td>
<td>Health Trends and Surveillance</td>
</tr>
<tr>
<td>CHL5406H</td>
<td>Quantitative Methods for Biomedical Research</td>
</tr>
<tr>
<td>CHL5407H</td>
<td>Categorical Data Analysis for Epidemiologic Studies</td>
</tr>
<tr>
<td>CHL5408H</td>
<td>Research Methods II</td>
</tr>
<tr>
<td>CHL5409H</td>
<td>Cancer Epidemiology</td>
</tr>
<tr>
<td>CHL5410H</td>
<td>Occupational Epidemiology</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>CHL5412H</td>
<td>Communicable Disease Epidemiology, Prevention, and Control</td>
</tr>
<tr>
<td>CHL5413H</td>
<td>Public Health Sanitation</td>
</tr>
<tr>
<td>CHL5416H</td>
<td>Environmental Epidemiology</td>
</tr>
<tr>
<td>CHL5417H</td>
<td>Tobacco and Health: From Cells to Society</td>
</tr>
<tr>
<td>CHL5418H</td>
<td>Scientific Overview in Epidemiology</td>
</tr>
<tr>
<td>CHL5419H</td>
<td>Social Epidemiology</td>
</tr>
<tr>
<td>CHL5420H</td>
<td>Global Health Research</td>
</tr>
<tr>
<td>CHL5423H</td>
<td>Doctoral Seminar in Epidemiology</td>
</tr>
<tr>
<td>CHL5424H</td>
<td>Advanced Quantitative Methods in Epidemiology</td>
</tr>
<tr>
<td>CHL5425H</td>
<td>Mathematical Epidemiology of Communicable Diseases: An Introduction</td>
</tr>
<tr>
<td>CHL5426H</td>
<td>Population Perspectives for Epidemiology</td>
</tr>
<tr>
<td>CHL5428H</td>
<td>Epidemiological Methods for Causal Mediation Analyses</td>
</tr>
<tr>
<td>CHL5429H</td>
<td>Advanced Analytic Methods for Bias in Epidemiologic Studies (prerequisites: at least two graduate-level epidemiology courses and at least two graduate-level biostatistics courses; or by permission of the instructor)</td>
</tr>
<tr>
<td>CHL5430H</td>
<td>Fundamentals of Genetic Epidemiology</td>
</tr>
<tr>
<td>CHL5431H</td>
<td>Spatial Epidemiology: Introductory Methods and Applications</td>
</tr>
<tr>
<td>CHL5432H</td>
<td>Epidemiological Methods for Communicable Diseases (prerequisites: CHL5201H, CHL5401H, and CHL5412H; or equivalent)</td>
</tr>
<tr>
<td>JRH1000H</td>
<td>Introduction to Pharmacoepidemiology</td>
</tr>
<tr>
<td>CHL5609H</td>
<td>Continuing Education in the Health Professions</td>
</tr>
<tr>
<td>CHL5610H</td>
<td>Theory and Practice of Behaviour Change in Health Professional Settings</td>
</tr>
<tr>
<td>CHL5611H</td>
<td>Continuing Education Planning, Management and Evaluation in the Health Professions</td>
</tr>
<tr>
<td>CHL5612H</td>
<td>The Theory and Application of Interprofessional Education for Collaborative Patient-Centred Practice</td>
</tr>
<tr>
<td>CHL5613H</td>
<td>Leading Improvement in the Quality of Health Care for Community Populations</td>
</tr>
<tr>
<td>CHL5614H</td>
<td>Curriculum Foundations in Health Practitioner Field-Based Education</td>
</tr>
<tr>
<td>CHL5615H</td>
<td>Assessment and Evaluation Issues in Health Practitioner Field-Based Education</td>
</tr>
<tr>
<td>CHL5616H</td>
<td>Applied Survey Methods for Health Care Professionals</td>
</tr>
<tr>
<td>CHL5617H</td>
<td>Educational Technology for Health Practitioner Education</td>
</tr>
<tr>
<td>CHL5618H</td>
<td>Family Medicine and Interprofessional Primary Care in the Global Health Context</td>
</tr>
<tr>
<td>CHL5619H</td>
<td>Faculty Development in the Health Professions (prerequisites: CHL5607H and CHL5608H)</td>
</tr>
<tr>
<td>CHL5622H</td>
<td>Patient-Related Health Care and Public Policy in Canada</td>
</tr>
<tr>
<td>CHL5623H</td>
<td>Practical Management Concepts and Cases in Leading Small Health Organizations</td>
</tr>
<tr>
<td>CHL5624H</td>
<td>Historical, Ethical, and Philosophical Foundations of Public Health</td>
</tr>
</tbody>
</table>

For Global Health, courses that may continue over a program. The course is graded when completed.

### Global Health

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHL5700H</td>
<td>Global Health</td>
</tr>
<tr>
<td>CHL5701H</td>
<td>Doctoral Seminar, Collaborative Specialization in Global Health (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5702H</td>
<td>History of International Health</td>
</tr>
<tr>
<td>CHL5704H</td>
<td>International Human Rights Law and Global Health: The Right to Health in Theory and Practice</td>
</tr>
<tr>
<td>CHL5706H</td>
<td>Women and Women's Health in Countries in Conflict</td>
</tr>
<tr>
<td>CHL5707H</td>
<td>Health: An Engine for the Journey to Peace</td>
</tr>
</tbody>
</table>
### Health Promotion

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5801H</td>
<td>Health Promotion 1</td>
</tr>
<tr>
<td>CHL5803H</td>
<td>Health Promotion 2</td>
</tr>
<tr>
<td>CHL5804H</td>
<td>Theories for Health Promotion and Public Health Intervention</td>
</tr>
<tr>
<td>CHL5805H</td>
<td>Critical Issues in Health Promotion Practice</td>
</tr>
<tr>
<td>CHL5806H</td>
<td>Health Promotion Field Research</td>
</tr>
<tr>
<td>CHL5807H</td>
<td>Health Communications</td>
</tr>
<tr>
<td>CHL5808H</td>
<td>Health-in-All-Policies: Approaches to Achieve a Healthier City</td>
</tr>
<tr>
<td>CHL5809H</td>
<td>Ecological Public Health</td>
</tr>
<tr>
<td>CHL5810H</td>
<td>Race, Ethnicity, and Culture in Health (REACH)</td>
</tr>
<tr>
<td>CHL5811H</td>
<td>Introduction to Qualitative Research</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

### Indigenous Health

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5520H</td>
<td>Indigenous Health</td>
</tr>
<tr>
<td>CHL5521H</td>
<td>Indigenous Practicum Preparation</td>
</tr>
<tr>
<td>CHL5522H</td>
<td>Indigenous Food Systems, Environment, and Health</td>
</tr>
<tr>
<td>CHL5523H</td>
<td>Indigenous Health and Social Policy</td>
</tr>
<tr>
<td>CHL5524H</td>
<td>Indigenous Health Theory and Methods</td>
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</table>

### Nutrition and Dietetics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5650H</td>
<td>Foundations of Practice I</td>
</tr>
<tr>
<td>CHL5651H</td>
<td>Foundations of Practice II</td>
</tr>
<tr>
<td>CHL5652H</td>
<td>Foundations of Practice III</td>
</tr>
<tr>
<td>CHL5653H</td>
<td>Community Nutrition</td>
</tr>
<tr>
<td>CHL5654H</td>
<td>Nutrition Programs and Strategies</td>
</tr>
<tr>
<td>CHL5655H</td>
<td>Nutrition Metabolism for Public Health Nutrition Professionals</td>
</tr>
<tr>
<td>CHL5656Y</td>
<td>Nutrition and Dietetics Culminating Project (prerequisites: CHL5650H, CHL5651H, and CHL5652H)</td>
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<tr>
<td>NFS1201H</td>
<td>Public Health Nutrition</td>
</tr>
<tr>
<td>NFS1484H</td>
<td>Advanced Nutrition</td>
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### Occupational and Environmental Health

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CHL5902H</td>
<td>Advanced Occupational Hygiene</td>
</tr>
<tr>
<td>CHL5903H</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>CHL5904H</td>
<td>Perspectives in Occupational and Environmental Health — Legal and Social Context</td>
</tr>
<tr>
<td>CHL5905H</td>
<td>Clinical Studies in Occupational Health</td>
</tr>
<tr>
<td>CHL5907H</td>
<td>Radiological Health</td>
</tr>
<tr>
<td>CHL5910H</td>
<td>Occupational and Environmental Hygiene I</td>
</tr>
<tr>
<td>CHL5911H</td>
<td>Occupational and Environmental Hygiene II</td>
</tr>
<tr>
<td>CHL5912H</td>
<td>Occupational and Environmental Toxicology</td>
</tr>
<tr>
<td>CHL5914H</td>
<td>Physical Agents I — Noise</td>
</tr>
<tr>
<td>CHL5915H</td>
<td>Control of Occupational Hazards</td>
</tr>
<tr>
<td>CHL5917H</td>
<td>Concepts in Safety Management</td>
</tr>
<tr>
<td>CHL5918H</td>
<td>Biological Hazards in the Workplace and Community</td>
</tr>
<tr>
<td>CHL5919H</td>
<td>Public Health Mycology</td>
</tr>
<tr>
<td>CHL5920H</td>
<td>Occupational and Environmental Health Doctoral Seminar Series</td>
</tr>
<tr>
<td>CHL5921H</td>
<td>Protecting the Public from Air Pollution</td>
</tr>
<tr>
<td>CHL5950H</td>
<td>Special Topics in Occupational and Environmental Health</td>
</tr>
</tbody>
</table>

* Course that may continue over a program. The course is graded when completed.

### Public Health Policy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHL5300H</td>
<td>Public Health Policy</td>
</tr>
<tr>
<td>CHL5308H</td>
<td>Tools and Approaches for Public Health Policy Analysis and Evaluation</td>
</tr>
<tr>
<td>CHL5309H</td>
<td>Advanced Analysis of Topical Issues in Public Health Policy</td>
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### Public Health Sciences

<table>
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<th>Course Code</th>
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<tbody>
<tr>
<td>JRH5124H</td>
<td>Public Health Ethics</td>
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### Social and Behavioural Health Sciences

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CHL5101H</td>
<td>Social and Behavioural Theory and Health</td>
</tr>
<tr>
<td>CHL5102H</td>
<td>Social and Political Forces in Health</td>
</tr>
<tr>
<td>CHL5105H</td>
<td>Social Determinants of Health</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>CHL5109H</td>
<td>Gender and Health</td>
</tr>
<tr>
<td>CHL5110H</td>
<td>Theory and Practice of Program Evaluation</td>
</tr>
<tr>
<td>CHL5113H</td>
<td>Global Migration and Health</td>
</tr>
<tr>
<td>CHL5115H</td>
<td>Qualitative Analysis and Interpretation</td>
</tr>
<tr>
<td>CHL5117H</td>
<td>Women, Children, and Adolescent Health: A Global Perspective</td>
</tr>
<tr>
<td>CHL5118H</td>
<td>International Health, Human Rights, and Peace-Building</td>
</tr>
<tr>
<td>CHL5120H</td>
<td>Population Health Perspectives on Mental Health and Addictions</td>
</tr>
<tr>
<td>CHL5121H</td>
<td>Genomics, Bioethics, and Public Policy</td>
</tr>
<tr>
<td>CHL5122H</td>
<td>Advanced Qualitative Research: Framing, Writing, Beyond (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5126H</td>
<td>Building Community Resilience</td>
</tr>
<tr>
<td>CHL5128H</td>
<td>Intersectionality, Inequity, and Public Health</td>
</tr>
<tr>
<td>CHL5129H</td>
<td>Introduction to Mixed Methods Research for Public Health</td>
</tr>
<tr>
<td>CHL5130H</td>
<td>Advanced Methods in Applied Indigenous Health Research</td>
</tr>
<tr>
<td>CHL5131H</td>
<td>Theoretical Foundations of Qualitative Health Research</td>
</tr>
<tr>
<td>CHL5132H</td>
<td>Population Health Intervention Research (PHIR)</td>
</tr>
<tr>
<td>CHL5133H</td>
<td>Evaluating Quantitative Public Health Research</td>
</tr>
<tr>
<td>CHL5134H</td>
<td>Institutional Ethnography</td>
</tr>
<tr>
<td>CHL5150H</td>
<td>Data Collection Methods for Research and Evaluation Projects</td>
</tr>
<tr>
<td>JRP1000H</td>
<td>Theory and Method for Qualitative Researchers: An Introduction</td>
</tr>
</tbody>
</table>

### Practica Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5620Y</td>
<td>Practicum in Family Community Medicine (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5621H</td>
<td>Extension to Practicum in Family Community Medicine (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5690H</td>
<td>MScCH Required Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5691H</td>
<td>MScCH Optional Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL6010Y</td>
<td>Required MPH Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL6011H</td>
<td>Required Practicum Extension (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL6012Y</td>
<td>Long Extension to Required Practicum (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL6013H</td>
<td>Required MPH Advanced Standing Practicum (Credit/No Credit)</td>
</tr>
</tbody>
</table>

### Reading Courses and Research Projects

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL7001H</td>
<td>Directed Reading</td>
</tr>
<tr>
<td>CHL7002H</td>
<td>Directed Research</td>
</tr>
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</table>

### Special Topics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHL8001H</td>
<td>Selected Topics in Public Health Issues</td>
</tr>
<tr>
<td>CHL8002H</td>
<td>Selected Topics in Public Health: Methods and Approaches to Research and Practice</td>
</tr>
</tbody>
</table>

### Doctor of Public Health Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL4001H</td>
<td>Contemporary Approaches to Population Health and Health Equity</td>
</tr>
<tr>
<td>CHL4002H</td>
<td>Critical Appraisal and Use of Evidence</td>
</tr>
<tr>
<td>CHL4003H</td>
<td>Leading High Performing Health Systems</td>
</tr>
<tr>
<td>CHL4004H</td>
<td>Global Health Policy</td>
</tr>
<tr>
<td>CHL4005H</td>
<td>Governance and Financial Leadership</td>
</tr>
<tr>
<td>CHL5005H</td>
<td>Public Health Research (Credit/No Credit)</td>
</tr>
<tr>
<td>CHL5132H</td>
<td>Population Health Intervention Research (PHIR)</td>
</tr>
<tr>
<td>CHL5624H</td>
<td>Historical, Ethical, and Philosophical Foundations of Public Health</td>
</tr>
<tr>
<td>HAD5763H</td>
<td>Advanced Methods in Health Services Research</td>
</tr>
<tr>
<td>HAD5765H</td>
<td>Case Studies in Health Policy</td>
</tr>
<tr>
<td>HAD5778H</td>
<td>Comparative Health Systems and Policy</td>
</tr>
<tr>
<td>HAD6501H</td>
<td>Introduction to Methods/Methodologies for HPER</td>
</tr>
</tbody>
</table>

\* Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.

\* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
**Collaborative Specialization Courses**

**Addiction Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS3700H</td>
<td>Multidisciplinary Aspects of Addictions</td>
</tr>
<tr>
<td>PAS3701H</td>
<td>Advanced Research Issues in Addictions</td>
</tr>
</tbody>
</table>

**Bioethics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL3020H</td>
<td>Ethics and Artificial Intelligence for Health</td>
</tr>
</tbody>
</table>

**Community Development**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCS1000H</td>
<td>Community Development</td>
</tr>
</tbody>
</table>
Rehabilitation Sciences

Rehabilitation Sciences: Introduction

Faculty Affiliation

Medicine

Degree Programs

Rehabilitation Science

MSc and PhD

- Fields:
  - Movement Science;
  - Occupational Science;
  - Practice Science (admissions have been administratively suspended);
  - Rehabilitation Health Services Studies;
  - Rehabilitation Technology Sciences;
  - Social and Cognitive Rehabilitation Sciences

Speech-Language Pathology

MSc and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Aging, Palliative and Supportive Care Across the Life Course
  - Rehabilitation Science, MSc, PhD
  - Speech-Language Pathology, MSc, PhD
- Bioethics
  - Rehabilitation Science, MSc, PhD
- Biomedical Engineering
  - Rehabilitation Science, MSc, PhD
- Cardiovascular Sciences
  - Rehabilitation Science, MSc, PhD
- Global Health (U of T Global Scholar)
  - Rehabilitation Science, MSc, PhD
- Health Services and Policy Research
  - Rehabilitation Science, MSc
- Musculoskeletal Sciences
  - Rehabilitation Science, MSc, PhD
- Neuroscience
  - Rehabilitation Science, MSc, PhD
  - Speech-Language Pathology, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Rehabilitation Science, MSc, PhD
- Women’s Health
  - Rehabilitation Science, MSc, PhD

Overview

Rehabilitation sciences is a multidisciplinary, integrated science dedicated to the study of human function and participation and its relationship to health and well-being. Using basic and applied methods, the science is focused on phenomena at the level of the cell, person, family, community, or society to develop and evaluate theories, models, processes, measures, interventions, and policies to prevent, reverse, or minimize impairments, enable activity, and facilitate participation.

The academic activities of students in the Rehabilitation Sciences Institute (RSI) cover the full breadth of rehabilitation sciences with over 100 RSI faculty who are distributed throughout the University of Toronto, including teaching hospitals and research institutes.

There are five areas of research in the Rehabilitation Sciences program:

- Movement science
- Occupational science
- Rehabilitation health services studies
- Rehabilitation technology sciences
- Social and cognitive rehabilitation sciences.

There are four areas of research in the Speech-Language Pathology program:

- Alternative and augmentative communication sciences
- Hearing and aural rehabilitation sciences
- Language, voice, and speech sciences
- Swallowing sciences.

Contact and Address

Web: www.rsi.utoronto.ca
Email: rsi.admin@utoronto.ca
Telephone: (416) 946-8582
Fax: (416) 946-8762

Rehabilitation Sciences Institute
University of Toronto
Rehabilitation Sciences Building
Room 160, 500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Rehabilitation Science: Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Astell, Arlene - BSc, PhD
Bayley, Mark - MD
Beal, Deryk - BA, MHSc, PhD
Biddiss, Elaine Alisa - MSc, PhD
Bressmann, Tim - MPh, PhD
Brooks, Dina - BSc(PT), MSc, PhD (Coordinator of Graduate Studies)
Cameron, Jill - BSc, MS, PhD
Chau, Tom - PhD
Chen, Joyce - BSc(PT), BPHE, PhD, ScD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Dawson, Deirdre - BSc, MSc, PhD
De Nil, Luc - MSc, PhD
Fernie, Geoffrey - BSc, PhD
Gibson, Barbara - MSc, BMR(PT), PhD
Green, Robin - PhD
Jaglal, Susan - BSc, MSc, PhD
Kennedy, Sidney - DPsych, MBChB, BAO
King, Gillian - BA, MA, PhD
Kirsh, Bonnie - BSc(OT), MEd, PhD
Koeberle, Paulo - BS, PhD
Martino, Rosemary - BS, MA, PhD
Mathur, Sunita - BSc(PT), MSc(PT), PhD
McGilton, Kathy - BScN, MN, PhD
McIlroy, William - BSc, PhD
McPherson, Amy - BSc, PhD
Mihailidis, Alex - BASc, MSc, PhD
Musselman, Kristin - MSc(PT), PhD
Mustard, Cameron - AB, ScD
Nalder, Emily - BOTh, PhD
Nixon, Stephanie - BSc(PT), BA, MSc, PhD
O’Brien, Kelly - BSc(PT), BS, PhD
Parsons, Janet - BSc(PT), BA, MSc, PhD
Patterson, Kara - BSc, BPT, MSc, PhD
Popovic, Milos - DipIng, PhD
Rappolt, Susan - BSc(OT), MSc, PhD
Reed, Nick - BA, MSc, PhD
Roy, Eric - BSc, MPE, PhD
Rochon, Elizabeth - BA, MSc, PhD
Salbach, Nancy - BSc(PT), BA, MSc, PhD
Steele, Catriona - BA, MHSc, PhD
Taati, Babak - PhD
Thomas, Scott - BSc, MSc, PhD
van Lieshout, Pascal - MA, MA, PhD
Yoshida, Karen - BSc, BPHE, MSc, PhD
Yunusova, Yana - MA, MA, PhD
Zabjek, Karl - BSc, MClSc, PhD

Members Emeriti

Berg, Katherine - BPT, BSc(PT), MSc, PhD
Cott, Cheryl - DipP, BPT, MSc, PhD
Davis, Aileen - BSc(PT), MSc, PhD
Friedland, Judith - BA, MA, PhD
Polataiko-Howell, Helene J. - PhD
Verrier, Molly - DipOT, MHSc

Goldstein, Roger - MBChB
Hamdani, Yani - MA, PhD
Hitzig, Sander - PhD
Ho, Emily - BSc(OT), MEd, PhD, PhD
Hunt, Anne - MSc, PhD
Iaboni, Andrea - BSc, MD, PhD
Kalsi-Ryan, Sukhvinder - BSc(PT)
Kingsnorth, Shauna - BS, MA, PhD
Kroshus, Emily - DSc
MacKay, Crystal - MHSc
Marzolini, Susan - BS, MSc, PhD
Mollayeva, Tatyana - MD, PhD
Moola, Fiona - BPHE, MSc, PhD
Mori, Brenda - BSc(PT), MSc, PhD
Narayanan, Unni - MSc, MD
Ng, Stella - BA, MA, PhD
Nowrouzi-Kia, Behdin - BSc, MSc
Rabin, Jenny - PhD
Ross, Tim - PhD
Rowland, Paula - BS, BS
Shikako-Thomas, Keiko - PhD
Simpson, Robert - MBChB
Swaine, Bonnie - MSc, DSc
Sweet, Shane - PhD, PhD
Switzer-Mcintyre, Sharon - BSc, BPHE, MEd, PhD
Thau, Michael - PhD
Wang, Rosalie - BSc, BSc(OT), PhD
Wasilewski, Marina B. - BSc, MSc, PhD
Wong, Andy Kin On - BS, PhD
Zinman, Lorne - MSc, MD

Rehabilitation Sciences: Rehabilitation Science MSc

Master of Science

Program Description

The MSc program is designed for graduate students who ultimately want careers as independent scientists in health-related disciplines. It can also serve as a stepping stone on the pathway to advanced research training for students planning to pursue a PhD in Rehabilitation Science or related fields.

The program is offered in the following fields: 1) Movement Science; 2) Occupational Science; 3) Practice Science; 4) Rehabilitation Health Services Studies; 5) Rehabilitation Technology Sciences; 6) Social and Cognitive Rehabilitation Sciences.

Members Emeriti

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Associate Members

Berbrayer, David - MD, BScMed
Chan, Vincy - DPhil
Colella, Tracey J.P. - MSc, PhD
Colquhoun, Heather - PhD
Cullen, Nora - MD
Fehlings, Darcy - MD
Furlan, Julio - MSc, DrMed, PhD

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Colquhoun, Heather - PhD
Cullen, Nora - MD
Fehlings, Darcy - MD
Furlan, Julio - MSc, DrMed, PhD
Fields:
Movement Science;
Occupational Science;
Rehabilitation Health Services Studies;
Rehabilitation Technology Sciences;
Social and Cognitive Rehabilitation Sciences

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute’s additional admission requirements stated below.
- Applicants must have graduated with a minimum B+ average in senior-level courses in the final two years of a four-year degree program from a recognized university, with a strong undergraduate science background including a course in research design and/or statistics. The four-year degree may be in Occupational Therapy, Physical Therapy, Speech-Language Pathology, or a related discipline.
- Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the TWE
    - Internet-based TOEFL (IBT): 100/120 and 22/30 on the writing and speaking sections.
  - International English Language Testing System (IELTS): minimum score of 7.5.
  - U of T School of Continuing Studies academic preparation: see General Regulations, 4.3 English-Language Proficiency.

Program Requirements

- Coursework. Students must complete 2.5 full-course equivalents (FCEs) as follows:
  - REH1100H Theory and Research in Rehabilitation Science (0.5 FCE).
  - REH2001Y0 Rehabilitation Presentations and Proceedings (1.0 FCE; Credit/No Credit). Students are expected to attend for one year.
  - 0.5 graduate FCE in research methods.
  - 0.5 graduate FCE in an area related to the student's thesis.
  - Students may be required to take extra courses in addition to the degree requirements listed above.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
15 sessions part-time

Time Limit

3 years full-time;
6 years part-time

Field: Practice Science

Effective January 2021, admissions to the field in Practice Science have been administratively suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute's additional admission requirements stated below.
- Applicants must have graduated with a minimum B+ average in senior-level courses in the final two years of a four-year degree program from a recognized university, with a strong undergraduate science background including a course in research design and/or statistics. The four-year degree may be in Occupational Therapy, Physical Therapy, Speech-Language Pathology, or a related discipline.
- Exceptional students may be considered for enrolment in a part-time option. Requirements are the same as for the full-time MSc option with the following exceptions:
  - Residency requirements (full-time, on-campus attendance) are waived.
  - Coursework must be completed within two years of initial registration.
  - Program must be completed within five years of registration.
  - Completion of an annual learning contract and program map planned with the supervisor.
  - Part-time students should be aware that it is the student's responsibility to modify his or her work schedule to accommodate required coursework since course times are not flexible.
- Reclassification (transfer). MSc students who demonstrate outstanding potential for advanced research in the discipline may be recommended by their supervisory committee for a reclassification examination which, when passed, allows them to transfer into the PhD program. The examination is normally undertaken following the completion of at least one session and within 18 months of registration in the MSc program.
kinesiology, nursing, psychology, social work, sociology, and physical and health education.

- Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.

- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the TWE
    - Internet-based TOEFL (IBT): 100/120 and 22/30 on the writing and speaking sections.
  - International English Language Testing System (IELTS): minimum score of 7.5.
  - U of T School of Continuing Studies academic preparation: see General Regulations, 4.3 English-Language Proficiency.

**Program Requirements**

- **Coursework.** Students must complete 3.5 full-course equivalents (FCEs) as follows:
  - REH1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
  - REH2001Y0 *Rehabilitation Presentations and Proceedings* (1.0 FCE; Credit/No Credit). Students are expected to attend for one year.
  - 0.5 graduate FCE in research methods.
  - REH3301H *Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications* (0.5 FCE).
  - REH3302H *Determinants of Rehabilitation Practice* (0.5 FCE).
  - REH3303H *Rehabilitation Clinical Practicum* (0.5 FCE).
  - Students may be required to take extra courses in addition to the degree requirements listed above.

- Submission of a **thesis** and completion of an oral examination of the thesis.

- Minimum of 12 months of full-time study. Students should be aware that the completion of the thesis may take longer.

- The part-time option is not available in the Practice Science field.

- Reclassification (transfer). MSc students who demonstrate outstanding potential for advanced research in the discipline may be recommended by their supervisory committee for a reclassification examination which, when passed, allows them to transfer into the PhD program. The examination is normally undertaken following the completion of at least one session and within 18 months of registration in the MSc program.

**Program Length**

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

**Time Limit**

3 years full-time

*Course that may continue over a program. Credit is given when the course is completed.*

**Rehabilitation Sciences: Rehabilitation Science PhD; Fields:** 1) Movement Science; 2) Occupational Science; 3) Rehabilitation Health Services Studies; 4) Rehabilitation Technology Sciences; 5) Social and Cognitive Rehabilitation Sciences

**Doctor of Philosophy**

**Program Description**

The PhD program will prepare candidates for a career in scientific research; i.e., graduates will feed the demand for rehabilitation scientists and academic faculty in Canada and the global market. Graduates will be expected to acquire autonomy in conducting research and developing an independent research program. The program is designed to provide a broad knowledge of rehabilitation science research as well as advanced research skills and methodologies including acquisition of funding, formulation of research questions, discovery of new knowledge, data collection, analysis and interpretation, scholarly presentation, and publication and translation of knowledge for consumption by appropriate stakeholders.

The program is offered in the following fields: 1) Movement Science; 2) Occupational Science; 3) Practice Science; 4) Rehabilitation Health Services Studies; 5) Rehabilitation Technology Sciences; 6) Social and Cognitive Rehabilitation Sciences.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry following completion of a BSc degree.
Fields:
1) Movement Science;
2) Occupational Science;
3) Rehabilitation Health Services Studies;
4) Rehabilitation Technology Sciences;
5) Social and Cognitive Rehabilitation Sciences

PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute's additional admission requirements stated below.
- Applicants must have graduated with a minimum A– from a relevant thesis-based master’s program, such as Occupational Therapy, Physical Therapy, Rehabilitation Sciences, and Speech-Language Pathology.
- Applicants must submit the following along with their application: a letter of intent, two confidential reference letters that indicate the applicant’s preparation and competence to conduct research, and curriculum vitae.
- Applicants may be counselled prior to admission and provided with materials regarding potential PhD supervisors. Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the TWE
    - Internet-based TOEFL (IBT): 100/120 and 22/30 on the writing and speaking sections.
  - International English Language Testing System (IELTS): minimum score of 7.5.
  - U of T School of Continuing Studies academic preparation: see General Regulations, 4.3 English-Language Proficiency.

Program Requirements

- Coursework. A minimum of 2.0 full-course equivalents (FCEs) as follows:
  - REH3100H Advanced Rehabilitation Research Issues or equivalent (0.5 FCE) if an equivalent was not taken at the master’s level.
  - REH3001Y0 Advanced Rehabilitation Presentation and Proceedings (1.0 FCE; Credit/No Credit). Attendance is expected during the first two years of the program. Students remain enrolled and are encouraged to attend until completion of the degree.
- An advanced research methods course (0.5 FCE).
- Students may be required to take extra courses in addition to the degree requirements listed above.
- A comprehensive examination, with written and oral components, to be taken in the first 18 months of the program.
- Completion and defence of a thesis.
- Students are encouraged to participate in student and faculty research seminars in addition to their regular course requirements.
- Residence. Students are expected to be on campus and participating full-time until all program requirements are completed.

Program Length

4 years

Time Limit

6 years

0 Course that may continue over a program. Credit is given when the course is completed.

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute's additional admission requirements stated below.
- Well-qualified students with excellent research potential holding a BSc degree may be considered for direct admission to the PhD program. These applicants must:
  - Have a minimum A+/A average (GPA 4.0) in an undergraduate program from a recognized university;
  - Have previous relevant research experience, outstanding references, and a personal recommendation from a potential supervisor.
- Applicants must submit the following along with their application: a letter of intent, two confidential reference letters that indicate the applicant’s preparation and competence to conduct research, and curriculum vitae.
- Applicants may be counselled prior to admission and provided with materials regarding potential PhD supervisors. Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE) with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the TWE
Program Requirements

- **Coursework.** A minimum of 3.5 full-course equivalents (FCEs) as follows:
  - REH3100H Advanced Rehabilitation Research Issues or equivalent (0.5 FCE).
  - REH3001Y0 Advanced Rehabilitation Presentation and Proceedings (1.0 FCE; Credit/No Credit). Attendance is expected during the first two years of the program. Students remain enrolled and are encouraged to attend until completion of the degree.
  - REH1100H Theory and Research in Rehabilitation Science (0.5 FCE).
  - REH1120H Research Methods for Rehabilitation Science (0.5 FCE).
  - REH1130H Theory and Research in Occupational Science or REH1140H Theory and Research in Physical Therapy (0.5 FCE).
  - An advanced research methods course (0.5 FCE).
  - Students may be required to take extra courses in addition to the degree requirements listed above.
- A comprehensive examination, with written and oral components, to be taken in the first 2.5 years of the program.
- Completion and defence of a thesis.
- Students are encouraged to participate in student and faculty research seminars in addition to their regular course requirements.
- Residence. Students are expected to be on campus and participating full-time until all program requirements are completed.

**Program Length**

- 5 years

**Time Limit**

- 7 years

*Course that may continue over a program. Credit is given when the course is completed.*

Rehabilitation Sciences: Rehabilitation Science PhD; Field: Practice Science

**Doctor of Philosophy**

**Program Description**

The PhD program will prepare candidates for a career in scientific research; that is, graduates will feed the demand for rehabilitation scientists and academic faculty in Canada and the global market. Graduates will be expected to acquire autonomy in conducting research and developing an independent research program. The program is designed to provide a broad knowledge of rehabilitation science research as well as advanced research skills and methodologies including acquisition of funding, formulation of research questions, discovery of new knowledge, data collection, analysis and interpretation, scholarly presentation, and publication and translation of knowledge for consumption by appropriate stakeholders.

The program is offered in the following fields: 1) Movement Science; 2) Occupational Science; 3) Practice Science; 4) Rehabilitation Health Services Studies; 5) Rehabilitation Technology Sciences; 6) Social and Cognitive Rehabilitation Sciences.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry following completion of a BSc degree.

**Field: Practice Science**

**Effective January 2021, admissions to the field in Practice Science have been administratively suspended.**

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute’s additional admission requirements stated below.
- Applicants must have graduated with a minimum A– from a relevant thesis-based master’s program, such as Occupational Therapy, Physical Therapy, Rehabilitation Sciences, and Speech-Language Pathology.
- Applicants must submit the following along with their application: a letter of intent, two confidential reference letters that indicate the applicant’s preparation and competence to conduct research, and curriculum vitae.
- Applicants may be counselled prior to admission and provided with materials regarding potential PhD supervisors. Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.
Well-qualified students with excellent research potential holding a BSc degree may be considered for direct admission to the PhD program. These applicants must:

- Have a minimum A+/A average (GPA 4.0) in an undergraduate program from a recognized university;
- Have previous relevant research experience, outstanding references, and a personal recommendation from a potential supervisor.

Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:

- **Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE)** with the following minimum scores:
  - paper-based TOEFL: 600 and 5 on the TWE
  - Internet-based TOEFL (IBT): 100/120 and 22/30 on the writing and speaking sections.
- **International English Language Testing System (IELTS):** minimum score of 7.5.
- **Certificate of Proficiency in English (COPE):** see General Regulations, 4.3 English-Language Proficiency.
- **U of T School of Continuing Studies academic preparation:** see General Regulations, 4.3 English-Language Proficiency.

**Program Requirements**

**Coursework.** A minimum of 3.5 full-course equivalents (FCEs) as follows:

- REH3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE) if an equivalent was not taken at the master’s level.
- REH3001Y0 *Advanced Rehabilitation Presentation and Proceedings* (1.0 FCE; Credit/No Credit). Attendance is expected during the first two years of the program. Students remain enrolled and are encouraged to attend until completion of the degree.
- REH3301H *Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications* (0.5 FCE).
- REH3302H *Determinants of Rehabilitation Practice* (0.5 FCE).
- REH3303H *Rehabilitation Clinical Practice* (0.5 FCE).
- An advanced research methods course (0.5 FCE).
- Students may be required to take extra courses in addition to the degree requirements listed above.

A **comprehensive examination**, with written and oral components, to be taken in the first 18 months of the program.

Completion and defence of a **thesis**.

Students are encouraged to participate in student and faculty research seminars in addition to their regular course requirements.

**Residence.** Students are expected to be on campus and participating full-time until all program requirements are completed.

**Program Length**

4 years

**Time Limit**

6 years

*Course that may continue over a program. Credit is given when the course is completed.*

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Rehabilitation Sciences Institute’s additional admission requirements stated below.
- Well-qualified students with excellent research potential holding a BSc degree may be considered for direct admission to the PhD program. These applicants must:
  - Have a minimum A+/A average (GPA 4.0) in an undergraduate program from a recognized university;
  - Have previous relevant research experience, outstanding references, and a personal recommendation from a potential supervisor.
- Applicants must submit the following along with their application: a letter of intent, two confidential reference letters that indicate the applicant’s preparation and competence to conduct research, and curriculum vitae.
- Applicants may be counselled prior to admission and provided with materials regarding potential PhD supervisors. Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - **Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE)** with the following minimum scores:
    - paper-based TOEFL: 600 and 5 on the TWE
    - Internet-based TOEFL (IBT): 100/120 and 22/30 on the writing and speaking sections.
  - **International English Language Testing System (IELTS):** minimum score of 7.5.
  - **Certificate of Proficiency in English (COPE):** see General Regulations, 4.3 English-Language Proficiency.
  - **U of T School of Continuing Studies academic preparation:** see General Regulations, 4.3 English-Language Proficiency.

**Program Requirements**

- **Coursework.** A minimum of 5.0 full-course equivalents (FCEs) as follows:
  - REH3100H *Advanced Rehabilitation Research Issues* or equivalent (0.5 FCE) if an equivalent was not taken at the master’s level.
Advanced Rehabilitation Presentation and Proceedings (1.0 FCE; Credit/No Credit). Attendance is expected during the first two years of the program. Students remain enrolled and are encouraged to attend until completion of the degree.

REH3001Y0 Advanced Rehabilitation Presentation and Proceedings: Foundational Knowledge and Innovative Applications (0.5 FCE).

REH3301H Determinants of Rehabilitation Practice (0.5 FCE).

REH3302H Rehabilitation Clinical Practicum (0.5 FCE).

REH1100H Theory and Research in Rehabilitation Science (0.5 FCE).

REH1120H Research Methods for Rehabilitation Science (0.5 FCE).

REH1130H Theory and Research in Occupational Science or REH1140H Theory and Research in Physical Therapy (0.5 FCE).

An advanced research methods course (0.5 FCE).

Students may be required to take extra courses in addition to the degree requirements listed above.

- A comprehensive examination, with written and oral components, to be taken in the first 2.5 years of the program.
- Completion and defence of a thesis.
- Students are encouraged to participate in student and faculty research seminars in addition to their regular course requirements.
- Residence. Students are expected to be on campus and participating full-time until all program requirements are completed.

Program Length

5 years

Time Limit

7 years

Course that may continue over a program. Credit is given when the course is completed.

Rehabilitation Sciences: Speech-Language Pathology MSc

Master of Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Rehabilitation Sciences Institute’s additional admission requirements stated below.
- An appropriate bachelor’s degree in speech-language pathology or a related discipline, with a minimum of a mid-B in the final year of the program.
- Prior to admission, an applicant must identify a faculty member who has agreed to serve as research supervisor. The research supervisor may want to examine a completed thesis and/or manuscripts and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Rehabilitation Sciences Institute’s additional admission requirements stated below.
- Normally, applicants are expected to have completed an MSc or MA degree in speech-language pathology or a related discipline, with a minimum of a B+ average over the course of the program.
- Applicants must submit the following with their application: a letter of intent, two confidential reference letters that indicate the applicant’s preparation and competence to conduct research, and curriculum vitae.
- Demonstrated advanced research qualifications in speech and language sciences.
- Applicants may be counselled prior to admission and provided with materials regarding potential PhD supervisors. Applicants must identify a faculty member who has agreed to serve as research supervisor. The research supervisor is expected to examine a completed thesis and/or manuscripts, reference letters, and university transcripts.
- Applicants who were educated outside Canada, whose primary language is not English, and who graduated from a university where the language of instruction and examination was not English, must demonstrate proficiency in the English language through the successful completion of one of the following tests:
  - Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE):
    - paper-based TOEFL: minimum 600 and 5 on the TWE
    - Internet-based TOEFL (IBT): minimum 100/120 and 22/30 on the writing and speaking sections
  - International English Language Testing System (IELTS): minimum score of 7.5
  - Certificate of Proficiency in English (COPE): see General Regulations, section 4.3 English-Language Proficiency
  - U of T School of Continuing Studies Academic English preparation: see General Regulations, section 4.3 English-Language Proficiency.
- Applicants who graduated from a university outside North America are strongly encouraged to contact the Coordinator of Graduate Studies before applying.
- Reclassification. MSc students who demonstrate outstanding potential for advanced research in the discipline may be recommended by their supervisory committee for a reclassification examination which, when passed, allows them to transfer into the PhD program. Examination normally is undertaken following the completion of at least one session and within 18 months of registration in the MSc program.

Program Requirements

- Coursework. Normally, students must complete a minimum of 2.0 full-course equivalents (FCEs) as follows:
  - At least 1.0 FCE in research design and methodology.
  - At least 1.0 FCE in the area of research interest.
  - Course requirements are determined by the student’s supervisory committee.
- Participate in student and faculty research seminars.
- Submission of a thesis based on the student’s research, and completion of an oral examination of the thesis.
- Minimum of 12 months of full-time study. Students should be aware that completion of the thesis may take longer.
- Reclassification. MSc students who demonstrate outstanding potential for advanced research in the discipline may be recommended by their supervisory committee for a reclassification examination which, when passed, allows them to transfer into the PhD program. Examination normally is undertaken following the completion of at least one session and within 18 months of registration in the MSc program.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Rehabilitation Sciences: Speech-Language Pathology PhD

Doctor of Philosophy

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) transfer from the University of Toronto MSc program.

Program Requirements

- Coursework. Students must complete a minimum of 2.0 full-course equivalents (FCEs) as follows:
  - REH3100H Advanced Rehabilitation Research Issues (0.5 FCE) if an equivalent was not taken at the master’s level.
• Advanced research methods and design courses (minimum 1.0 FCE).
• 0.5 graduate FCE related to the area of study.
• Attendance every two weeks at the SLP Research Colloquia (0.0 FCE).
• Course requirements are determined by the student's supervisory committee.
• Students may be required to take extra courses in addition to the degree requirements listed above.

- Students must demonstrate evidence of adequate knowledge in research design and statistics or must include suitable coursework as determined by the supervisory committee.
- A comprehensive examination, with written and oral components, to be taken in the first 18 months of the program.
- Completion and defence of a thesis in a formal departmental defence, followed by the SGS Doctoral Final Oral Examination.
- Participation in student and faculty research seminars in addition to the regular course requirements.
- Students are expected to be on campus and participating full-time until all program requirements are completed.

Program Length

4 years full-time; 5 years transfer-from-master's

Time Limit

6 years full-time; 7 years transfer-from-master's

Rehabilitation Sciences: Speech-Language Pathology MSc, PhD Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SLP3001H</td>
<td>Theoretical Foundations of Communication Sciences</td>
</tr>
<tr>
<td>SLP3002H</td>
<td>Research Methodologies in Communication Sciences</td>
</tr>
<tr>
<td>SLP3003H</td>
<td>Reading Seminar 1</td>
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<tr>
<td>SLP3004H,Y</td>
<td>Reading Seminar 2</td>
</tr>
<tr>
<td>SLP4000H</td>
<td>Reading Seminar 1</td>
</tr>
<tr>
<td>SLP4001H</td>
<td>Philosophical and Theoretical Foundations of Communication Sciences</td>
</tr>
<tr>
<td>SLP4007H,Y</td>
<td>Reading Seminar 2</td>
</tr>
</tbody>
</table>

*Course that may continue over a program. The course is graded when completed.
Religion

Religion: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Religion

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Bioethics
  - Religion, MA, PhD
- Book History and Print Culture
  - Religion, MA, PhD
- Diaspora and Transnational Studies
  - Religion, MA, PhD
- Environmental Studies
  - Religion, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - Religion, MA, PhD
- Jewish Studies
  - Religion, MA, PhD
- Knowledge Media Design
  - Religion, MA, PhD
- Mediterranean Archaeology
  - Religion, PhD
- Sexual Diversity Studies
  - Religion, MA, PhD
- South Asian Studies
  - Religion, MA, PhD
- Women and Gender Studies
  - Religion, MA, PhD
- Women’s Health
  - Religion, MA, PhD

Overview

The Department for the Study of Religion offers Master of Arts and Doctor of Philosophy programs in the study of religion and facilitates research and publication on religion. The department consolidates the vast curricular and faculty resources that are distributed throughout the many departments and colleges of the University and enables its students to use any resource in the University which serves the study of religion.

The department conceives the academic study of religion in interdisciplinary terms and embraces humanistic, historical, and social scientific approaches and methods. Programs of study are constructed individually to fit the specific needs and interests of each student. As a guideline for areas of strength in the department, the department is organized by the following fields:

- Buddhist Studies
- Christianity
- Hinduism and South Asian Religions
- Islam
- Judaism
- Religion, Culture, and Politics
- Religion, Ethics, and Modern Thought
- Religion and Medicine
- Religions of Mediterranean Antiquity.

These fields do not determine program requirements. Most faculty and students participate in multiple fields.

Contact and Address

Web: www.religion.utoronto.ca
Email: religion.grad@utoronto.ca
Telephone: (416) 978-3057
Fax: (416) 978-1610

Department for the Study of Religion
University of Toronto
Room 305, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Religion: Graduate Faculty

Full Members

Airhart, Phyllis - BA, MA, PhD
Allen, Andrea - PhD
Bendlin, Andreas - PhD
Bergen, Doris - MA, PhD
Black, Deborah - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Bohaker, Heidi - BA, BEd, MA, DPhil
Bryant, Joseph - BA, MA, PhD
Butt, Waqas - BA, PhD
Clarke, Kamari - BA, MA, MPH, LLM, PhD
Clooney, Francis - BA, MDiv, PhD
Coleman, Simon - BA, PhD
Daswani, Girish - BSc, BSc, MS, PhD
Dhand, Arti - BA, MA, PhD
DiCenso, James - BA, MA, PhD
Emmrich, Christoph - PhD
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Fadel, Mohammad - BA, JD, PhD
Fox, Harry - BA, BSc, MA, MS, PhD
Garrett, Frances - BA, MA, PhD
Gibbs, Robert - BA, MA, PhD
Goetschel, Willi - PhD
Goodman, Amanda - BA, MA, PhD
Green, Kenneth - BA, MA, PhD
Harra, Amir - MA, LTh, PhD
Harris, Jennifer - BA, MA, PhD
Hewitt, Marsha - BA, MA, PhD
Hill, Susan - PhD
Jervis, Ann - BA, MDiv, DTh
Kasturi, Malavika - DPhil
Khan, Abraham - BS, BD, MA, PhD
Kingwell, Mark - BA, MA, MPH, DFA, PhD
Klassen, Pamela - BA, MA, PhD (Chair and Graduate Chair)
Kloppenborg, John - BA, MA, PhD
Lambek, Michael - BA, MA, PhD
Locklin, Reid - AB, MTh, PhD
Marshall, John - BA, MA, PhD
Marshall, Ruth - BA, MA, DPhil
Metso, Sarianna - MA, PhD
Mittermaier, Amira - MA, PhD (Acting Director of Graduate Studies)
Moumtaz, Nada - PhD
Mullin, Amy - BA, PhD
Napolitano, Valentina - BSc, MPH, PhD
Newman, Judith - PhD
Novak, David - AB, PhD
O’Neill, Kevin - BA, MA, PhD
Raman, Srilata - BA, MPH, PhD
Rao, Ajay - PhD (Director of Graduate Studies)
Ross, Jill - BA, MA, PhD
Ruffle, Karen - PhD
Saleh, Walid - BA, MA, PhD
Scharper, Stephen - BA, MA, PhD
Seidman, Naomi - PhD
Shachar, Ayelet - LLB, BA, LLM, SJD
Sharma, Jayeeta - BA, MPH, MA, PhD
Smith, Kyle - BA, MA, PhD
Stoeber, Michael - BA, MA, PhD
Subtelny, Maria - BA, PhD
Sweetman, Robert - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Virani, Shafique - PhD

Associate Members
Brittain, Christopher - BA, MDiv, PhD
Bugg, Laura Beth - DTh
Chartrand-Burke, Anthony - PhD
Derry, Ken - PhD
Goldberg, Sol - MA, PhD
Graheili, Alessandro - BA, MA, PhD
Hampton, Alexander - PhD
Khan, Pasha Mohamad - PhD
Louw, Maria - PhD
Nizri, Yigal - BFA
Obrock, Luther James - BA, MA, PhD
Raffaelli, Enrico - PhD
Vig, Julie - MA
White, Kevin - MA, PhD
Yu, Kenneth - PhD

Religion: Religion MA

Master of Arts

Program Description

The MA program may be taken on a full-time or part-time basis. The department’s Graduate Studies Handbook, available on the web and from the department, provides details on admissions and programs as well as the research and teaching interests of the faculty.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department for the Study of Religion’s additional admission requirements stated below.
- Normally, an appropriate bachelor’s degree with specialization in religion or a cognate discipline from a recognized university, broadly equivalent to the University of Toronto’s BA Specialist degree in religion, with at least A– standing in the final year. Students without appropriate preparation may be required to take additional work either before admission or during an extended master’s program.

Program Requirements

- **Courses.** Students must complete 4.0 full-course equivalents (FCEs) including:
  - RLG2000Y Major Research Paper (1.0 FCE).
  - RLG1200H MA Method and Theory Workshop (0.5 FCE).
  - One Gateway Seminar (0.5 FCE).
  - One Religion course (0.5 FCE).
  - In some cases, students may be required to take additional courses, some of which may be at the undergraduate level. Students may be required to take more than 4.0 FCEs if their preparation is considered deficient in a subject required for their program.
  - Satisfactory performance requires the completion of all coursework taken for graduate credit with an average grade of at least A–.
- **Language(s).** Reading knowledge of at least one language, in addition to English, selected from languages of modern scholarship and/or necessary source languages, as approved by the Director of Graduate Studies.

Program Length

- 3 sessions full-time (typical registration sequence: F/W/S);
- 6 to 8 sessions part-time

Time Limit

- 3 years full-time;
- 6 years part-time
Religion: Religion PhD

Doctor of Philosophy

Program Description

From the point of admission onward, doctoral student programs must be matched with the expertise of at least three professors who help supervise the student's work. The department's Graduate Studies Handbook, available on the web and from the department, provides details on admissions and programs as well as the research and teaching interests of the faculty. The PhD program is taken on a full-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department for the Study of Religion's additional admission requirements stated below.
- Normally, completion of all requirements of the department's MA program, or a comparable program at another university, with an average of at least A– in coursework and with no individual course falling below B.

Program Requirements

- **Courses.** Students must complete a minimum of 4.0 full-course equivalents (FCEs), including the following:
  - RLG1000Y Method and Theory in the Study of Religion (1.0 FCE).
  - One Gateway Seminar (0.5 FCE).
  - Two Religion courses (1.0 FCE).
- Students may be required to take more than 4.0 FCEs if their preparation is considered deficient in a subject required for their program.
- Satisfactory performance requires the completion of all coursework taken for graduate credit with an average grade of at least A–.
- **Languages.** Reading knowledge of at least two languages in addition to English, selected from languages of scholarship and necessary source languages, as approved by the Director of Graduate Studies. Classical and modern forms of the same language are not permitted. The language requirements must be fulfilled before writing the general examinations.
- **Professionalization seminar.** Doctoral students must complete SRD4444Y Doctoral Seminar Series — Compulsory Attendance (CR/NCR, 0.0 FCE). This seminar consists of a series of workshops which must be completed to fulfil the requirement.
- **General examinations.** Upon completion of coursework, the language requirements, and the thesis pre-proposal, the student's supervisory committee will set General Examinations to assess the student's readiness for thesis research. There are three components in the General Examinations:
  - A four-hour written examination will cover the student's area of specialization;
  - A three-hour written examination will cover at least one important cognate area; and
  - A two-hour oral examination on all materials assigned for the General Examinations.
- A student who fails any portion of the General Examinations may be re-examined once, no later than nine months after the date of the first examination. The General Examinations must be completed before the end of the third year of doctoral study.
- **Thesis proposal.** Within three months of successful completion of the General Examinations, the student must submit a thesis proposal for approval by the student's supervisory committee.
- **Thesis.** Upon approval of the thesis proposal by the student's supervisory committee, the candidate proceeds to research and write a doctoral thesis which must be defended successfully at a Doctoral Final Oral Examination.
- **Colloquium presentation.** Once general examinations are completed, PhD candidates are required to present at least once in the Department for the Study of Religion’s colloquium before undertaking their Doctoral Final Oral Examination.
- **Doctoral Final Oral Examination.** The supervisory committee must approve the completed thesis before it is submitted for examination.
- **Residence.** Students are required to spend at least two fall and winter sessions on campus in full-time study, normally in Years 1 and 2.

Program Length

4 years (some students may take longer)

Time Limit

6 years

Religion: Religion MA, PhD Courses

Not all courses are offered every year. Please consult the department's website, which lists the courses the department will offer this year as well as those cross-listed from other departments.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>RLG1000H</td>
<td>Anthropology of Religion Gateway Seminar</td>
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<tr>
<td>RLG1000Y</td>
<td>Method and Theory in the Study of Religion</td>
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<tr>
<td>RLG1002H</td>
<td>Philosophy of Religion Gateway Seminar</td>
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<tr>
<td>RLG1003H</td>
<td>Islamic Studies Gateway Seminar</td>
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<td>RLG1004H</td>
<td>Religions of Mediterranean Antiquity Gateway Seminar</td>
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<td>RLG1200H</td>
<td>The MA Method and Theory Workshop</td>
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<td>RLG1501H</td>
<td>Directed Reading</td>
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<td>RLG1502H</td>
<td>Directed Reading</td>
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<td>RLG2000Y</td>
<td>Major Research Paper</td>
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<td>RLG2010H</td>
<td>Religion and Liberalism</td>
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<td>RLG2011H</td>
<td>Natural Law in Judaism and Christianity I</td>
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<tr>
<td>RLG2015H</td>
<td>Comparing Religion</td>
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<tr>
<td>RLG2016H</td>
<td>Radical Evil: Religious, Philosophical, and Psychological Response</td>
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<tr>
<td>RLG2017H</td>
<td>Religion, Secularism, and the Public Sphere</td>
</tr>
<tr>
<td>RLG2020H</td>
<td>Early Christianity, Ancient Judaism, Ancient &quot;Magic&quot;</td>
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<td>RLG2021H</td>
<td>Mystical Poetics and the Study of Religious Aesthetics</td>
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<td>RLG2022H</td>
<td>Religion, Mourning, and Trauma</td>
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<td>RLG2023H</td>
<td>Religion, Media, and Culture</td>
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<td>RLG2025H</td>
<td>Critical Theory of Religion</td>
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<td>RLG2027H</td>
<td>Law and Religion: Critical Conversations</td>
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<td>RLG2030H</td>
<td>Historiography of Religion</td>
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<td>RLG2042H</td>
<td>Re-Enchanting Nature: Spirituality and the New Nature Writing</td>
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<td>RLG2060H</td>
<td>Religion and Philosophy in the European Enlightenment</td>
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<td>RLG2061H</td>
<td>Why Philosophy Matters to Religious Studies</td>
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<td>RLG2062H</td>
<td>Modern Hermeneutics and Religion</td>
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<td>RLG2064H</td>
<td>Constructing Religion</td>
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<td>RLG2065H</td>
<td>Philosophical Texts in Religion</td>
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<td>RLG2067H</td>
<td>Philosophical Topics in the Study of Religion</td>
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<td>RLG2072H</td>
<td>Kant’s Theory of Religion</td>
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<td>RLG2081H</td>
<td>Foundations in Psychodynamic Theory and Clinical Practice</td>
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<td>RLG2084H</td>
<td>Social Science Approaches to Early Christianity: Topical Investigations</td>
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<td>RLG2086H</td>
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<td>RLG3114H</td>
<td>Christianity and Judaism in Colonial Context</td>
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<td>RLG3190H</td>
<td>Pseudepigraphy in Ancient Mediterranean Religion</td>
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<td>RLG3200H</td>
<td>The Politics of Bible Translation</td>
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<td>RLG3212H</td>
<td>Martyrdom in Early Christianity</td>
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<td>RLG3216H</td>
<td>Christianity in the Ancient Near East</td>
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<td>RLG3217H</td>
<td>Social Networks and Elective Cults in Antiquity</td>
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<td>RLG3228H</td>
<td>Social History of the Early Jesus Movement</td>
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<td>RLG3241H</td>
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<td>RLG3242H</td>
<td>Christian Asceticism in Late Antiquity</td>
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<tr>
<td>RLG3243H</td>
<td>The Synoptic Problem</td>
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<td>RLG3249H</td>
<td>Studies in the Synoptic Gospels</td>
</tr>
<tr>
<td>RLG3250H</td>
<td>Heresy and Deviance in Early Christianity</td>
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<tr>
<td>RLG3290H</td>
<td>Words and Worship in Christian Cultures</td>
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<tr>
<td>RLG3401H</td>
<td>Reading Buddhist Texts I</td>
</tr>
<tr>
<td>RLG3402H</td>
<td>Reading Buddhist Texts II</td>
</tr>
<tr>
<td>RLG3413H</td>
<td>Burmese Religions</td>
</tr>
<tr>
<td>RLG3419H</td>
<td>Teaching Buddhism</td>
</tr>
<tr>
<td>RLG3454H</td>
<td>Readings in Tibetan Buddhism I</td>
</tr>
<tr>
<td>RLG3460H</td>
<td>Sanskrit Readings</td>
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<tr>
<td>RLG3461H</td>
<td>Sanskrit Readings II</td>
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<tr>
<td>RLG3468H</td>
<td>The Buddhist Canon</td>
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<tr>
<td>RLG3490H</td>
<td>Buddhist Auto/biography</td>
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<tr>
<td>RLG3501H</td>
<td>Special Topics in Islamic Studies</td>
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<tr>
<td>RLG3516H</td>
<td>Islamic Law and Society</td>
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<tr>
<td>RLG3517H</td>
<td>Shi’i Studies: The State of the Field</td>
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<tr>
<td>RLG3518H</td>
<td>Foundations in Shi’i Studies</td>
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<tr>
<td>RLG3519H</td>
<td>Islamic Intellectual Traditions</td>
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<td>RLG3527H</td>
<td>The Anthropology of Islam</td>
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<td>RLG3528H</td>
<td>Tools of the Craft: Research Fluency in Islamic Studies</td>
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<td>RLG3544H</td>
<td>Islamicate Material Cultures</td>
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<td>The Prophetic Family in Islamic Tradition</td>
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<td>RLG3601H</td>
<td>Philo: The First Jewish Philosopher</td>
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<td>RLG3610H</td>
<td>Wisdom in Second Temple Judaism</td>
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<td>RLG3611H</td>
<td>Hebrew Literature and Religion: Midrash Aggadah</td>
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<td>RLG3621H</td>
<td>Modern Jewish Thought</td>
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<td>RLG3622H</td>
<td>Maimonides and His Modern Interpreters</td>
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<td>Worship and Scripture at Qumran</td>
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<td>RLG3645H</td>
<td>The Jewish Legal Tradition</td>
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<td>RLG3647H</td>
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<td>RLG3653H</td>
<td>Jewish Exegetical Traditions in Antiquity</td>
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<td>RLG3700H</td>
<td>Debates in Ancient Indian Religion and History</td>
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<td>RLG3701H</td>
<td>Vaishnavism</td>
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<td>RLG3702H</td>
<td>Debates in Classical South Asian Religion and History</td>
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<td>RLG3704H</td>
<td>Readings in Sanskrit Literature</td>
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<td>RLG3710H</td>
<td>Newar Religion</td>
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<tr>
<td>RLG3717H</td>
<td>Renunciation and Erotica in Sanskrit Poetry</td>
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Joint Courses

<table>
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<tr>
<td>JPR2051H</td>
<td>Fanaticism: A Political History</td>
</tr>
<tr>
<td>JPR2058H</td>
<td>Post-secular Political Thought: Religion, Radicalism, and the Limits of Liberalism</td>
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</tbody>
</table>

Other Departments

Other departments and collaborative specializations (see programs listed at the beginning of this entry) offer courses that may contribute to graduate programs in the study of religion. Visit the department’s website for a current listing of such course offerings from:

- Anthropology
- Art History
- East Asian Studies
- English
- Ethnic, Immigration and Pluralism Studies
- Germanic Languages and Literatures
- History
- History and Philosophy of Science and Technology
- Italian Studies
- Law
- Medieval Studies
- Near and Middle Eastern Civilizations
- Philosophy
- Political Science
- Sociology
- Toronto School of Theology
Over the last decade, curricula in all the languages, literatures and cultures taught in the department have been rewritten to mirror the dramatic social, cultural and political changes in Central, Eastern and Southern Europe. The department has developed new areas of research and expertise. Due to extensive internal cooperation and interdisciplinary focus, new common ground among disciplines has been found; the study of the interrelations of these cultures is promoted.

Contact and Address

Web: sites.utoronto.ca/slavic
Email: slavic@utoronto.ca
Telephone: (416) 946-0011
Fax: (416) 978-8226

Department of Slavic Languages and Literatures
University of Toronto
Room 431, 121 St. Joseph Street
Alumni Hall, St. Michael's College
Toronto, Ontario M5S 1J4
Canada

Slavic Languages and Literatures: Graduate Faculty

Full Members

Holland, Kate - MA, PhD (Associate Chair, Graduate)
Koznarsky, Taras - MA, PhD
Livak, Leonid - BA, AM, PhD
Mandusic, Zdenko - BA, MA, PhD
Obradovic, Dragana - MA, PhD
Orwin, Donna - PhD
Smolyarova, Tatiana - BA, MA, PhD, PhD
Tarnawsky, Maxim - BA, PhD
Trojanowska, Tamara - MA, PhD

Members Emeriti

Ambros, Veronika - MA, PhD
Bedford, Charles - MA, PhD
Kramer, Christina - BA, MA, PhD
Lindheim, Ralph - BA, MA
Ponomareff, Constant - BA, MA, PhD
Schallert, Joseph - BA, MA, PhD
Thomson, Roger - BA, MA, DPhil

Associate Members

Jezyk, Agnieszka - PhD
Mikhailova, Julia - AB, AM, AM, DPhil
Muhonen, Anu - PhD
Petrov, Ana - PhD

Overview

The Graduate Department of Slavic Languages and Literatures offers instruction leading to two degrees — Master of Arts and Doctor of Philosophy — in one of the broadest ranges of Slavic languages and literatures available in a North American university. Courses are offered in the following areas: Croatian and Serbian Languages and Literatures, Czech and Slovak Languages and Literatures, Polish Language and Literature, Russian Language and Literature, Slavic Linguistics, and Ukrainian Language and Literature.

The department's literature programs are especially strong in nineteenth and twentieth century literary and cultural history, modernism, avant-garde and contemporary movements, literary theory, drama, cinema, and Slavic-Jewish cultural relations.

The department's linguistics unit has particular strengths in language acquisition and pedagogy, and socio-linguistics. Students are advised to consult the list of faculty members and the description of their particular areas of expertise for more details.
Slavic Languages and Literatures: Slavic Languages and Literatures MA

Master of Arts

Program Description

All applicants complete the same application process. The department's admissions committee then determines each applicant's suitability for the one-year MA or two-year MA option, depending on their level of preparation. Students in the one-year MA program have the option to complete the program by coursework or coursework plus research paper.

MA Program (One-Year Coursework Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Slavic Languages and Literatures' additional admission requirements stated below.
- An appropriate bachelor's degree (preferably in a cognate area) with an overall standing equivalent to at least a University of Toronto mid-B in the final year.
- A minimum A– average in all Slavic subjects taken in the final two years is recommended.
- Proficiency in a Slavic language equivalent to at least three full years of language training, and broad familiarity with the literary and cultural history of the applicant's proposed disciplinary area(s) of interest (currently, Czech and Slovak, Polish, Russian, South Slavic, Slavic Linguistics, Ukrainian), as evidenced by undergraduate coursework at the 300 or 400 level, are required.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) including:
  - SLA1040H Methods of Teaching Slavic Languages (0.5 FCE)
  - Students who provide evidence of satisfactory completion of an equivalent course to SLA1040H may be exempted from this course.
- **Language.** Proficiency in the language of the major field of study must be demonstrated during the first week of the first session in the program. Additional language courses at the undergraduate level may be required. These courses will not count toward the 4.0 FCEs required to complete the program. Successful completion of all coursework in the undergraduate language courses is part of a student's good progress in the MA program.
- **Residence.** Normally, students spend a year in residence when they must be on campus and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

MA Program (One-Year Coursework-Plus-Research-Paper Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Slavic Languages and Literatures' additional admission requirements stated below.
- An appropriate bachelor's degree (preferably in a cognate area) with an overall standing equivalent to at least a University of Toronto mid-B in the final year.
- A minimum A– average in all Slavic subjects taken in the final two years is recommended.
- Proficiency in a Slavic language equivalent to at least three full years of language training, and broad familiarity with the literary and cultural history of the applicant's proposed disciplinary area(s) of interest (currently, Czech and Slovak, Polish, Russian, South Slavic, Slavic Linguistics, Ukrainian), as evidenced by undergraduate coursework at the 300 or 400 level, are required.

Program Requirements

- **Coursework.** Students must complete 3.0 full-course equivalents (FCEs) including:
  - SLA1040H Methods of Teaching Slavic Languages (0.5 FCE).
  - Students who provide evidence of satisfactory completion of an equivalent course to SLA1040H may be exempted from this course.
  - Students who intend to complete the Slavic linguistics field must complete SLA1109H Studies in Old Church Slavonic (0.5 FCE).
- **Language.** Proficiency in the language of the major field of study must be demonstrated during the first week of the first session in the program. Additional language courses at the undergraduate level may be required. These courses will not count toward the 3.0 FCEs required to complete the program. Successful completion of all coursework in the undergraduate language courses is part of a student's good progress in the MA program.
- **Research paper** written in English.
- **Residence.** Normally, students spend a year in residence when they must be on campus and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

2 sessions (typical registration sequence: F/W)

Time Limit

3 years
**Program Length**

2 sessions (typical registration sequence: F/W)

**Time Limit**

3 years

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**MA Program (Two-Year Coursework Option)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Slavic Languages and Literatures' additional admission requirements stated below.
- An appropriate bachelor's degree (preferably in a cognate area) with an overall standing equivalent to at least a University of Toronto mid-B in the final year.
- A minimum A– average in all Slavic subjects taken in the final two years is recommended.
- Intermediate proficiency in a Slavic language, as evidenced by two full years of language training or equivalent, is required.

**Program Requirements**

- **Coursework:** Students must complete 7.0 full-course equivalents (FCEs) including:
  - SLA1040H Methods of Teaching Slavic Languages (0.5 FCE)
  - Students who provide evidence of satisfactory completion of an equivalent course to SLA1040H may be exempted from this course.
  - Students who intend to complete the Slavic linguistics field must complete SLA1109H Studies in Old Church Slavonic (0.5 FCE).
- **Language.** Level of proficiency in the language of the major field of study must be established no later than the first week of the first session in the program to determine the required language courses.
- **Residence.** Normally, students spend two years in residence when they must be on campus and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

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**Program Length**

4 sessions (typical registration sequence: F/W/F/W)

**Time Limit**

3 years

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**Slavic Languages and Literatures: Slavic Languages and Literatures PhD**

**Doctor of Philosophy**

**Program Description**

PhD students may choose to complete a program in one of two fields:

- Slavic Linguistics
- Slavic Literatures.

**Field: Slavic Linguistics**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Slavic Languages and Literatures' additional admission requirements stated below.
- An appropriate University of Toronto master's degree with a minimum A– average in graduate courses and demonstrated research competence.

**Program Requirements**

Students are normally required to:

- Demonstrate **proficiency in the language of the major field of study** during the session's first week. Undergraduate language courses may be required. These are not tabulated as part of graduate program course requirements. Successful completion of all coursework in these remedial undergraduate courses is part of a student's good progress in the PhD program.
- Complete a major field of study and a minor field of study program.
- Complete **9.0 full-course equivalents (FCEs)** including:
  - At least 3.0 FCEs in Slavic linguistics.
  - 2.0 FCEs in theoretical linguistics from cognate disciplines (e.g., linguistics, anthropology).
  - 1.0 FCE in the literature of the major field of study language is strongly advised.
  - At least one course (0.5 FCE) in Slavic languages from each of the three groups: West Slavic, East Slavic, and South Slavic by the end of Year 3 (minimum 1.5 FCEs total).
  - Students may be given a course exemption up to 3.0 FCEs for work completed in the MA.
- **Minor field of study** programs should include 2.0 FCEs from any one of:
  - Croatian and Serbian Languages and Literatures.
  - Czech and Slovak Languages and Literatures.
  - Polish Language and Literature.
  - Russian Language and Literature.
- Slavic Linguistics, and Ukrainian Language and Literature.
- A cognate discipline, with departmental approval (e.g., cinema studies, comparative literature, drama, history, philosophy).
- Maintain a minimum annual average of A– to continue in the PhD program. Poor performance in one session (below a B average) may result in the termination of a student's PhD eligibility.
- Demonstrate a reading knowledge of French or German.
- After successful completion of coursework and the French or German language requirement, students must pass written comprehensive examinations in the major field of study field and written and oral comprehensive examinations in the special field. The major field of study field exam cannot be taken if students have any outstanding coursework.
- By the time of their major field of study field exam, students should have chosen their supervisor and the rest of their committee (in consultation with the supervisor).

**Dissertation.**

- **Residence.** In Years 1 and 2, students must take courses and be on campus full-time to participate fully in the PhD program's activities.

**Program Length**

4 years (many students require 5 years to complete the program)

**Time Limit**

6 years

**Field: Slavic Literatures**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Slavic Languages and Literatures' additional admission requirements stated below.
- An appropriate University of Toronto master's degree with a minimum A– average in graduate courses and demonstrated research competence.

**Program Requirements**

Students are normally required to:

- Demonstrate proficiency in the language of the major field of study during the session's first week. Undergraduate language courses may be required. These are not tabulated as part of graduate program course requirements. Successful completion of all coursework in these remedial undergraduate courses is part of a student's good progress in the PhD program.
- Complete SLA1010H Slavic Proseminar prior to taking comprehensive examinations.
- Complete a major field of study and a minor field of study program.
- Complete 9.0 full-course equivalents (FCEs) with at least 0.5 FCE in Slavic linguistics. Students may be given a course exemption up to 3.0 FCEs for work completed in the MA.
  - Complete SLA1104H Introduction to Old Church Slavonic (0.5 FCE; Credit/No Credit) if specializing in Russian, Ukrainian, or Bosnian-Croatian-Serbian.
- **Minor field of study programs** should include 2.0 FCEs from any one of:
  - Croatian and Serbian Languages and Literatures.
  - Czech and Slovak Languages and Literatures.
  - Polish Language and Literature.
  - Russian Language and Literature.
  - Slavic Linguistics, and Ukrainian Language and Literature.
  - A cognate discipline, with departmental approval (e.g., cinema studies, comparative literature, drama, history, philosophy).
- Maintain a minimum annual average of A– to continue in the PhD program. Poor performance in one session (below a B average) may result in the termination of a student's PhD eligibility.
- Acquire a working knowledge of a Slavic language other than their major field of study language or complete at least two approved undergraduate courses in a Slavic language that is different than their major field of study language of study by the end of Year 3. A working knowledge is defined as proficiency equivalent to a second-year course. Students must also satisfy departmental requirements for their major field of study language. Students who do not major field of study in Russian most often choose it as their second Slavic language.
- Demonstrate a reading knowledge of French or German.
- After successful completion of coursework and the French or German language requirement, students must pass written comprehensive examinations in the major field of study field and written and oral comprehensive examinations in the special field. The major field of study field exam cannot be taken if students have any outstanding coursework.
- By the time of their major field of study field exam, students should have chosen their supervisor and the rest of their committee (in consultation with the supervisor).
- **Dissertation.**
- **Residence.** In Years 1 and 2, students must take courses and be on campus full-time to participate fully in the PhD program's activities.

**Program Length**

4 years (many students require 5 years to complete the program)

**Time Limit**

6 years
# Slavic Languages and Literatures: Slavic Languages and Literatures MA, PhD Courses

Not all courses are offered every year. Students should consult the departmental handbook for current course offerings.

## General Slavic

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SLA1010H</td>
<td>Slavic Proseminar</td>
</tr>
<tr>
<td>SLA1039H</td>
<td>Kyiv-Kiev-Kijow: A City and the Text</td>
</tr>
<tr>
<td>SLA1040H</td>
<td>Methods of Teaching Slavic Languages</td>
</tr>
<tr>
<td>SLA1050H</td>
<td>Theatricality and Spectacle in the History of Russian Culture. From Jesters to Meyerhold.</td>
</tr>
<tr>
<td>SLA1207H</td>
<td>The Imaginary Jew</td>
</tr>
<tr>
<td>SLA1320H</td>
<td>Postcommunism — Postcolonialism — Postdependence: Central and Eastern European Perspectives</td>
</tr>
<tr>
<td>SLA1330H</td>
<td>Literature and Science</td>
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<tr>
<td>SLA1340H</td>
<td>Desires, Dreamscapes, and the Death Drive: Psychoanalysis and Literature</td>
</tr>
<tr>
<td>SLA1405H</td>
<td>Contemporary East European Cinemas</td>
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<tr>
<td>SLA1421H</td>
<td>Women in East European Fiction</td>
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<tr>
<td>SLA1521H</td>
<td>Post-Modernity and the Mythopoetic Legacy of Mitteleuropa</td>
</tr>
<tr>
<td>SLA2000Y</td>
<td>Reading and Research</td>
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<td>SLA2001H</td>
<td>One Term Reading and Research</td>
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<td>COL5037H</td>
<td>Magic Prague: Question of Literary Cityscapes</td>
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<td>JLV5134H</td>
<td>Theories of the Novel</td>
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<td>JLV5135H</td>
<td>1968: The Year of Revolution and Protest</td>
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<td>JLV5143H</td>
<td>Censorship, Culture, Archive</td>
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<td>Transgressions: Drama, Theatre, Performance</td>
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<tr>
<td>SLA1308H</td>
<td>Critical Paradigms in Polish Culture</td>
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<tr>
<td>SLA1312Y</td>
<td>Modernism and Post-Modernism in Polish Literature</td>
</tr>
<tr>
<td>SLA1315H</td>
<td>Intellectual Traditions, Culture, and Literature: Trajectories in Poland</td>
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## Russian Literature

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<td>SLA1202H</td>
<td>Gulag Literature</td>
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<tr>
<td>SLA1203H</td>
<td>The Self and Other in Russian Prose</td>
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<td>SLA1204H</td>
<td>Contemporary Russian Literature</td>
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<tr>
<td>SLA1207H</td>
<td>The Imaginary Jew</td>
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<tr>
<td>SLA1210H</td>
<td>Studies in Medieval Russian Literature</td>
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<td>SLA1211Y</td>
<td>Studies in the Russian Drama: Eighteenth to Twentieth Century</td>
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<td>Studies in Russian Literature and Criticism in the Eighteenth Century</td>
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<td>SLA1216H</td>
<td>From English to Russian Literature and Back</td>
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<td>SLA1218H</td>
<td>Pushkin</td>
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<td>SLA1220H</td>
<td>Nineteenth Century Russian Thinkers</td>
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<td>SLA1222Y</td>
<td>Russian Poetry and Poetics</td>
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<td>SLA1223H</td>
<td>Introduction to Russian Poetry and Poetics</td>
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<tr>
<td>SLA1224H</td>
<td>19th-Century Russian Poetry</td>
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<tr>
<td>SLA1225H</td>
<td>Russian Literature in the Age of Empire</td>
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<tr>
<td>SLA1226H</td>
<td>Dostoevsky in Literary Theory and Criticism</td>
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<tr>
<td>SLA1228H</td>
<td>Themes in Russian Realism</td>
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<tr>
<td>SLA1229H</td>
<td>Russian Literature Between Tradition and Modernity (exclusion: SLA1225H)</td>
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<tr>
<td>SLA1231H</td>
<td>Russian Modernism</td>
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<td>SLA1234H</td>
<td>Dostoevsky</td>
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<td>SLA1238H</td>
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<td>SLA1411H</td>
<td>Synthesis of Arts in the Late Russian Empire–Early Soviet Union</td>
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<td>SLA1900H</td>
<td>Russian Nineteenth-Century Poetry</td>
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### Slavic Linguistics

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<td>Methods of Teaching Slavic Languages</td>
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<td>SLA1041Y</td>
<td>Advanced Training in Slavic Languages I</td>
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<td>SLA1042Y</td>
<td>Advanced Training in Slavic Languages II</td>
</tr>
<tr>
<td>SLA1102Y</td>
<td>Advanced Russian Language Skills</td>
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<td>SLA1104H</td>
<td>Introduction to Old Church Slavonic (Credit/No Credit)</td>
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<td>SLA1109H</td>
<td>Studies in Old Church Slavonic</td>
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<tr>
<td>SLA1141H</td>
<td>History of the Ukrainian Language</td>
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<td>SLA1142H</td>
<td>Style and Structure of Ukrainian</td>
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<td>SLA1150H</td>
<td>Russian Since the Revolution</td>
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### Russian Language

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<td>History of the Russian Language</td>
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<tr>
<td>SLA1102Y</td>
<td>Advanced Russian Language Skills</td>
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### Ukrainian Literature/Language

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SLA1141H</td>
<td>History of Ukrainian Language</td>
</tr>
<tr>
<td>SLA1142H</td>
<td>Style and Structure of Ukrainian</td>
</tr>
<tr>
<td>SLA1402Y</td>
<td>Studies in Ukrainian Modernism</td>
</tr>
<tr>
<td>SLA1403Y</td>
<td>Contemporary Ukrainian Literature</td>
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<tr>
<td>SLA1404Y</td>
<td>Studies in Ukrainian Poets</td>
</tr>
<tr>
<td>SLA1406Y</td>
<td>Studies in Ukrainian Literary Criticism</td>
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<tr>
<td>SLA1407H</td>
<td>Aspects of Literary Translation of Ukrainian</td>
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</tbody>
</table>
Social Justice Education

Social Justice Education: Introduction

Faculty Affiliation

Ontario Institute for Studies in Education (OISE)

Degree Programs

Social Justice Education

MA, MEd, EdD, and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Comparative, International and Development Education  
  Social Justice Education, MA, MEd, EdD, PhD
- Development Policy and Power  
  Social Justice Education, MA, MEd
- Diaspora and Transnational Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- Education, Francophones and Diversity  
  Social Justice Education, MA, MEd, EdD, PhD
- Educational Policy  
  Social Justice Education, MA, MEd, EdD, PhD
- Environmental Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- Ethnic, Immigration and Pluralism Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- Indigenous Health  
  Social Justice Education, MA, MEd, EdD, PhD
- Sexual Diversity Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- South Asian Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- Women and Gender Studies  
  Social Justice Education, MA, MEd, EdD, PhD
- Workplace Learning and Social Change  
  Social Justice Education, MA, MEd, EdD, PhD

Overview

The department's graduate programs are concerned with both theoretical and empirical problems regarding in/equity in educational spaces, broadly conceived. Faculty and students approach their inquiries from disciplinary (e.g., anthropology, history, philosophy, political science, or sociology) and/or interdisciplinary (e.g., anti-colonial, critical race, disability, feminist, francophone, indigenous, or queer) perspectives. They focus on identifying new relationships and making connections by asking significant questions about social justice education within and across disciplines. Hence, they foreground research and teaching in social justice education, pursued through analytical and empirical tools from the humanities and social sciences.

The department's vision is to enable both graduate students and initial teacher education students to explore questions such as, “What was, what is, and what should be the relationship between education and society?” and “What kinds of knowledge do educators need to answer those questions?” The department aims to provide students with the academic knowledge and skills necessary to engage and raise questions of critical importance to educational theories and practices, and their relationship to individuals, communities, and societies.

Contact and Address

Admissions

Initial inquiries regarding admission to graduate studies in the Department of Social Justice Education (SJE) should be made directly to:

Web: www.oise.utoronto.ca/orss
Email: admissions.oise@utoronto.ca
Tel: (416) 978-4300
Fax: (416) 323-9964

Office of the Registrar and Student Services
Ontario Institute for Studies in Education (OISE)
University of Toronto
252 Bloor Street West, Room 8-225
Toronto, Ontario M5S 1V6
Canada

Program

Web: www.oise.utoronto.ca/sje
Email (Admissions and Programs): oise.sjegrad@utoronto.ca
Phone: (416) 978-0397

Department of Social Justice Education
Ontario Institute for Studies in Education
University of Toronto
252 Bloor Street West, 12th Floor North
Toronto, Ontario M5S 1V6
Canada
Social Justice Education: Graduate Faculty

Full Members

Bakan, Abigail - BA, MA, PhD
Bialystok, Lauren - PhD
Boler, Megan - BA, PhD
Cannon, Martin - MA, PhD
Coloma, Roland Sintos - TD, BA, MA, MA, PhD
Dei, George J.S. - BA, MA, PhD
Farmer, Diane - BA, MSS, PhD
Georgis, Dina - PhD
Heller, Monica - BA, MA, PhD
McDougall, Douglas - BM, BEd, MEd, EdD
O’Sullivan, Julia - BA, MA, PhD
Portelli, John - MEd, PhD
Titchkosky, Tanya - BA, MA, PhD
Tuck, Eve - BA, PhD
Walcott, Rinaldo - BA, MA, PhD (Chair and Graduate Chair)

Members Emeriti

Bredo, Eric - BA, MA, PhD
Gamlin, Peter - BA, MA, PhD
Razack, Sherene - BA, MA, PhD

Associate Members

Bale, Jeff - BA, MS, PhD
Dahya, Negin - BA, MEd, PhD
Doyle-Wood, Stanley - BE, MSS, EdD
Hampton, Rosalind - PhD
Kang, Sonia - BSc, MA, PhD
Kellogg, Paul - BA, MA, DrRerPol
Lawson, Erica - BA, MA, PhD
Lo, Marieme - BA, MA, MSc, PhD
McGuire, Anne - AB, MA, EdD
Recollet, Karyn - PhD
Zoric, Terezia - BEd, BA, MA

Social Justice Education: Social Justice Education MA

Master of Arts

Program Description

The Social Justice Education (SJE) program welcomes applicants with diverse but relevant backgrounds. The MA program is a research-based degree program which can be taken on a full-time or part-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department’s additional admission requirements stated below.
  - Admission to the MA program requires an appropriate bachelor’s degree in a humanities, social science, or cognate discipline from a recognized university, with standing equivalent to a University of Toronto mid-B or better in the final year.
  - Applicants are required to submit the following; incomplete applications may be subject to processing delays or rejection:
    - A careful statement of intellectual interests and concerns relevant to the humanities, or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student’s research interests.
    - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked.
    - At least one sample of written work that demonstrates engagement with the humanities, or social sciences, and social justice in education.
    - Resumé that provides clear and complete information about the applicant’s work or field experience related to their proposed studies.

Program Requirements

- **Coursework.** Students must complete *3.0 full-course equivalents (FCEs)* as follows:
  - Subject to consultation with a faculty advisor, SJE1903H Major Concepts and Issues in Social Justice Education (0.5 FCE) is recommended.
  - 2.5 other FCEs, of which at least 1.5 FCEs must be SJE courses.
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.
  - Additional courses may be required of some students, and some students may be required to take specified courses in research methods and/or theory.
- Students complete a **thesis** which may lay the groundwork for doctoral research.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time
Social Justice Education: Social Justice Education MEd

Master of Education

Program Description

The Department of Social Justice Education (SJE) welcomes applicants with diverse but relevant backgrounds. The Master of Education (MEd) program can be taken on a full-time or part-time basis.

Students may complete the MEd program by one of three options:

- Coursework Only Option
- Coursework Plus Major Research Paper (MRP) Option
- Coursework Plus Thesis Option (admissions have been administratively suspended)

Students who are accepted into the MEd program are automatically assigned to the Coursework Only Option. They can transfer to the Coursework Plus Major Research Paper Option after they begin their program and have secured an SJE faculty supervisor for the MRP or thesis.

MEd Program (Coursework Only Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- Admission to the MEd program requires an appropriate bachelor's degree from a recognized university, with a standing equivalent to a University of Toronto mid-B or better in the final year.
- Applicants must have the equivalent of 12 months of professional experience.
- Applicants must submit the following; incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities, or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.
  - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked; the second letter of reference may be written by a work or community-based supervisor.
  - At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.

- Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.

Program Requirements

- Coursework. Students must complete 5.0 full-course equivalents (FCES) including:
  - Subject to consultation with a faculty advisor, SJE1903H Major Concepts and Issues in Social Justice Education (0.5 FCE) is recommended.
  - At least half of the FCEs in an MEd program must be SJE courses.
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.

Program Length

4 sessions full-time (typical registration sequence: F/W/S/F);
10 sessions part-time

Time Limit

3 years full-time;
6 years part-time

MEd Program (Coursework Plus Major Research Paper Option)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- Admission to the MEd program requires an appropriate bachelor's degree from a recognized university, with a standing equivalent to a University of Toronto mid-B or better in the final year.
- Applicants must have the equivalent of 12 months of professional experience.
- Applicants must submit the following; incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.
  - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked; the second letter of reference may be written by a work or community-based supervisor.

- Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.
At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.  
Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.

Program Requirements

- **Coursework.** Students must complete **4.0 full-course equivalents (FCES)** including:
  - Subject to consultation with a faculty advisor, SJE1903H *Major Concepts and Issues in Social Justice Education* (0.5 FCE) is recommended.  
  - At least half of the FCEs in an MEd program must be SJE courses.  
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.  
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.

Program Length

5 sessions full-time (typical registration sequence: F/W/S/F/W); 10 sessions part-time

Time Limit

3 years full-time; 
6 years part-time

MEd Program (Coursework Plus Thesis Option)

Admissions have been administratively suspended.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.  
- Admission to the MEd program requires an appropriate bachelor's degree from a recognized university, with a standing equivalent to a University of Toronto mid-B or better in the final year.  
- Applicants must have the equivalent of 12 months of professional experience.  
- Applicants must submit the following: incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.  
- Two letters of reference, preferably from university instructors with whom the applicant has studied or worked; the second letter of reference may be written by a work or community-based supervisor.  
- At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.  
- Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.

Program Requirements

- **Coursework.** Students must complete **3.0 full-course equivalents (FCES)** including:
  - Subject to consultation with a faculty advisor, SJE1903H *Major Concepts and Issues in Social Justice Education* (0.5 FCE) is recommended.  
  - At least half of the FCEs in an MEd program must be SJE courses.  
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.  
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.
- **Thesis.**

Program Length

6 sessions (typical registration sequence: F/W/S/F/W/S); 10 sessions part-time

Time Limit

3 years full-time; 
6 years part-time

Social Justice Education: Social Justice Education MA, MEd Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services' course schedule.

**Master's Level**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SJE1900H</td>
<td>Introduction à la sociologie de l'éducation</td>
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<tr>
<td>SJE1900H</td>
<td>Introduction to Sociology in Education</td>
</tr>
<tr>
<td>SJE1902H</td>
<td>Introductory Sociological Research Methods in Education</td>
</tr>
<tr>
<td>SJE1903H</td>
<td>Major Concepts and Issues in Social Justice Education</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>SJE1905H</td>
<td>Qualitative Approaches to Sociological Research in Education</td>
</tr>
<tr>
<td>SJE1909H</td>
<td>Environmental Sustainability and Social Justice</td>
</tr>
<tr>
<td>SJE1912H</td>
<td>Foucault and Research in Education and Culture: Discourse, Power, and the Subject</td>
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<tr>
<td>SJE1919H</td>
<td>Advanced Topics in Environmental Justice Education</td>
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<tr>
<td>SJE1921Y</td>
<td>The Principles of Anti-Racism Education</td>
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<tr>
<td>SJE1922H</td>
<td>Sociology of Race and Ethnicity</td>
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<tr>
<td>SJE1923H</td>
<td>Racism, Violence, and the Law: Issues for Researchers and Educators</td>
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<tr>
<td>SJE1924H</td>
<td>Modernization, Development, and Education in African Contexts</td>
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<tr>
<td>SJE1925H</td>
<td>Indigenous Knowledge and Decolonization: Pedagogical Implications</td>
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<tr>
<td>SJE1925H</td>
<td>Savoir indigène et décolonization</td>
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<tr>
<td>SJE1926H</td>
<td>Race, Space, and Citizenship: Research Methods</td>
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<tr>
<td>SJE1927H</td>
<td>Migration and Globalization</td>
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<tr>
<td>SJE1929H</td>
<td>Theorizing Asian Canada</td>
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<tr>
<td>SJE1930H</td>
<td>Race, Indigeneity, and the Colonial Politics of Recognition</td>
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<tr>
<td>SJE1931H</td>
<td>Centering Indigenous-Settler Solidarity in Theory and Research</td>
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<tr>
<td>SJE1932H</td>
<td>Decolonization, Settler Colonialism, and Antiblackness (exclusion: SJE5024H)</td>
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<tr>
<td>SJE1933H</td>
<td>Participatory Action Research and Community Based Research (exclusion: SJE5011H)</td>
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<tr>
<td>SJE1951H</td>
<td>L'école, la participation parentale et la communauté</td>
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<tr>
<td>SJE1951H</td>
<td>The School and the Community</td>
</tr>
<tr>
<td>SJE1954H</td>
<td>Marginality and the Politics of Resistance</td>
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<tr>
<td>SJE1956H</td>
<td>Social Relations of Cultural Production in Education</td>
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<tr>
<td>SJE1957H</td>
<td>Disability Studies: An Introduction</td>
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<tr>
<td>SJE1958H</td>
<td>The Cultural Production of the Self as a Problem in Education</td>
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<tr>
<td>SJE1959H</td>
<td>Theoretical Frameworks in Culture, Communications, and Education</td>
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<tr>
<td>SJE1961H</td>
<td>Spirituality and Schooling</td>
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<td>SJE1970H</td>
<td>Applied Ethics in Higher Education</td>
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<tr>
<td>SJE1971H</td>
<td>Identity and Education</td>
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<td>SJE1972H</td>
<td>Contemporary Ethical Issues in Schooling and Education</td>
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<tr>
<td>SJE1973H</td>
<td>Liberalism and its Critics</td>
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<tr>
<td>SJE1974H</td>
<td>Truth Commissions Reconciliation and Indian Residential Schools</td>
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<tr>
<td>SJE1975H</td>
<td>Indigenous Settler Relations Issues for Teachers</td>
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<tr>
<td>SJE1976H</td>
<td>Critical Media Literacy Education</td>
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<tr>
<td>SJE1977H</td>
<td>Sociology of Indigenous and Alternative Approaches to Health and Healing Practices: Implications for Education</td>
</tr>
<tr>
<td>SJE1978H</td>
<td>Sexual, Racial, and Gender-Based Violence Prevention in Higher Education</td>
</tr>
<tr>
<td>SJE1979H</td>
<td>Race, Gender, Sexuality, and Empire in Socialist Economies and States</td>
</tr>
<tr>
<td>SJE1982H</td>
<td>Women, Diversity, and the Educational System</td>
</tr>
<tr>
<td>SJE1989H</td>
<td>Black Feminist Thought</td>
</tr>
<tr>
<td>SJE2001Y</td>
<td>Major Research Paper</td>
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<tr>
<td>SJE2030H</td>
<td>Disability Studies and the Human Imaginary (exclusion: SJE5004H)</td>
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<tr>
<td>SJE2929H</td>
<td>Disability Studies — Interpretive Methods — RM (exclusion: SJE3929H)</td>
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<tr>
<td>SJE2941H</td>
<td>Bourdieu: Theory of Practice in Social Sciences</td>
</tr>
<tr>
<td>SJE2998H</td>
<td>Individual Reading and Research in Social Justice Education: Master's</td>
</tr>
<tr>
<td>SJE5000H</td>
<td>Special Topics in Social Justice Research in Education: Master's Level</td>
</tr>
<tr>
<td>JTE1952H</td>
<td>Language, Culture, and Education / Langue, culture, et éducation</td>
</tr>
</tbody>
</table>

*Course that may continue over a program. The course is graded when completed.*

**Social Justice Education: Social Justice Education EdD**

**Doctor of Education**

**Program Description**

The Doctor of Education (EdD) degree program is distinct from the PhD in that students are encouraged to orient towards applied and theoretical dimensions of professional educational practice understood as knowledge, teaching, and learning which takes place within or beyond schooling.

The EdD in Social Justice Education (SJE) is ideal for those with an interest in professional and/or voluntary practice in relevant field domains, where there is an interface between theory and...
practice and where the vision, skills, and commitment of dedicated and research-informed practitioners are pivotal to outcomes. Those interested in the degree program will be working professionals including teachers, school and community leaders, health and legal professionals, and those working, volunteering, or seeking employment in related fields in social justice education.

The Department of Social Justice Education welcomes applicants with diverse but relevant backgrounds. The EdD program can be taken on a full-time or part-time basis.

Students cannot transfer between the EdD and PhD programs.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- Admission to the EdD program requires a University of Toronto MEd or MA in education, or its equivalent from a recognized university, in the same field of specialization proposed at the doctoral level, completed with a standing equivalent to a University of Toronto B+ or better in master's courses.
- Applicants must have the equivalent of 12 months of professional experience.
- Applicants must submit the following; incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.
  - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked; the second letter of reference may be written by a work-based supervisor.
  - At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.
  - Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.

Program Requirements

- **Coursework.** Students must complete 4.0 full-course equivalents (FCEs) as follows:
  - Required half course (0.5 FCE): SJE3997H Practicum in Social Justice Education (72 hours).
  - Subject to consultation with a faculty advisor, SJE3905H Interdisciplinary Approaches to Research: Theory and Praxis (0.5 FCE) is recommended.
  - Students who have completed the recommended course SJE3905H must take 3.0 other FCEs, of which at least 1.5 FCEs must be SJE courses.
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.

- **Thesis (dissertation in practice).** Students submit a thesis and defend it at a Doctoral Final Oral Examination. The thesis (dissertation in practice) is the culminating component of the EdD degree in Social Justice Education that shall include an identification and investigation of a problem of practice, the application of theory and research to the problem of practice, and a design for action to address the problem of practice. Specifically, the thesis (dissertation in practice) is expected to be the product of original research, designed and implemented in the form of an innovative, impactful, and potentially sustainable plan, policy, guideline, advocacy or activism model, relevant to an educational setting, broadly defined, and aimed at improving practice on a local, regional, national or international scale.

- Students may begin their studies on a part-time basis. However, they must register full-time for a minimum of two consecutive sessions, not including Summer, of on-campus study. Once enrolled full-time, students must maintain continuous registration full-time and pay full-time fees until all degree requirements, including the thesis, are completed.

Program Length

4 years full-time; 6 years part-time

Time Limit

6 years full-time; 6 years part-time

Social Justice Education: Social Justice Education PhD

Doctor of Philosophy

Program Description

The PhD degree program is designed to provide opportunities for advanced study, original research, and theoretical analysis. The PhD program can be taken on a full-time or flexible-time basis. The Department of Social Justice Education (SJE) welcomes applicants with diverse but relevant backgrounds.

The flexible-time PhD degree is designed to accommodate demand by practising professionals for a PhD degree that permits continued employment in areas related to their areas of research. Degree requirements for the flexible-time and full-time PhD programs are the same. Flexible-time PhD students register full-time during the first four years and part-time during subsequent years of the program.
PhD Program

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- PhD students who are admitted without sufficient previous study in a humanities, social science, or a cognate discipline may be required to take additional courses.
- Applicants are required to submit the following; incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.
  - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked.
  - At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.
  - Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.

Program Requirements

- **Coursework.** Students must complete 3.0 full-course equivalents (FCEs) including:
  - Subject to consultation with a faculty advisor, SJE3905H *Interdisciplinary Approaches to Research: Theory and Praxis* (0.5 FCE) is recommended. Additional courses may be required, and some students may be required to take other specified courses in research methods and/or theory.
  - At least 2.0 FCEs must be taken within SJE.
  - Students who are registered in a collaborative specialization may apply to have their SJE course requirement reduced by 0.5 FCE.
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.

- **Comprehensive examination:**
  - Students are encouraged to take, as part of their program requirements, one half course (0.5 FCE) focused on the substantive area on which they will be examined.
  - Students choose one of the following:
    - a major paper (30 to 40 pages); or
    - a substantive course outline (30 to 40 pages) for a topic of interest to the student within the area of social justice education; or
    - a solid draft of a scholarly article.
  - The option selected and the date for the comprehensive exam will be decided by the student and the supervisor. The comprehensive exam should be taken no later than the end of Year 3.
  - A student who fails the comprehensive exam will be permitted one additional attempt to pass. A second failure will result in the recommendation for termination of the student's registration.
  - Comprehensive exams will be graded on a pass or fail basis.
  - Students must submit a thesis and defend it at a Doctoral Final Oral Examination. The thesis must embody the results of original investigation conducted by the student under the direction of an OISE thesis committee. The thesis must constitute a significant contribution to the knowledge of the field of study. The student must have an approved thesis topic, supervisor, and an approved thesis committee by the end of Year 3, and must have completed all other program requirements.
  - PhD students must register continuously and pay the full-time fee until all degree requirements have been fulfilled.
  - Students cannot transfer between the full-time and flexible-time PhD options.
  - Students cannot transfer between the EdD program and PhD programs.

PhD Program (Flexible-Time)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the department's additional admission requirements stated below.
- PhD students who are admitted without sufficient previous study in a humanities, social science, or a cognate discipline may be required to take additional courses.
- Applicants are required to submit the following; incomplete applications may be subject to processing delays or rejection:
  - A careful statement of intellectual interests and concerns relevant to the humanities or social sciences, and social justice in education as well as reasons for undertaking a program in the department, including a statement of preference for one or more faculty members whose research is best matched to the student's research interests.
  - Two letters of reference, preferably from university instructors with whom the applicant has studied or worked.
  - At least one sample of written work that demonstrates engagement with the humanities or social sciences, and social justice in education.
  - Resumé that provides clear and complete information about the applicant's work or field experience related to their proposed studies.
- Applicants must demonstrate that they are currently employed and are active professionals engaged in activities related to their proposed program of study.
Program Requirements

- **Coursework.** Students must complete at least 3.0 full-course equivalents (FCEs) including:
  - At least 2.0 FCEs taken in SJE, with the possibility to apply for a reduction of 0.5 FCE in the SJE course requirement if the student is also registered in a collaborative specialization.
  - Subject to consultation with a faculty advisor, SJE3905H *Interdisciplinary Approaches to Research: Theory and Praxis* (0.5 FCE) is recommended.
  - Students must consult with their faculty advisor before enrolling in any out-of-department course for which they wish to receive SJE credit.

- **Comprehensive examination:**
  - Students are encouraged to take, as part of their program requirements, one half course (0.5 FCE) focused on the substantive area on which they will be examined.
  - Students choose one of the following:
    - a major paper (30 to 40 pages); or
    - a substantive course outline (30 to 40 pages) for a topic of interest to the student within the area of social justice education; or
    - a solid draft of a scholarly article.
  - The option selected and the date for the comprehensive exam will be decided by the student and the supervisor. The comprehensive exam should be taken no later than the end of Year 4.
  - A student who fails the comprehensive exam will be permitted one additional attempt to pass. A second failure will result in the recommendation for termination of the student's registration.
  - Comprehensive exams will be graded on a pass or fail basis.

- Students must submit a **thesis** and defend it at a **Doctoral Final Oral Examination**. The thesis must embody the results of original investigation conducted by the student under the direction of an OISE thesis committee. The thesis must constitute a significant contribution to the knowledge of the field of study. The student must have an approved thesis topic, supervisor, and an approved thesis committee by the end of Year 3, and must have completed all other program requirements.

- Students must register continuously until all degree requirements have been fulfilled. Students register full-time during the first four years and may continue as part-time thereafter, with their department's approval.
- Students cannot transfer between the full-time and flexible-time PhD options.
- Students cannot transfer between the EdD and PhD programs.

**Program Length**

6 years

**Time Limit**

8 years

Social Justice Education: Social Justice Education EdD, PhD Courses

Not all courses are offered every year. Please consult the Office of the Registrar and Student Services’ course schedule.

**Doctoral Level**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJE1440H</td>
<td>An Introduction to Philosophy of Education</td>
</tr>
<tr>
<td>SJE1979H</td>
<td>Race, Gender, Sexuality, and Empire in Socialist Economies and States</td>
</tr>
<tr>
<td>SJE2929H</td>
<td>Disability Studies — Interpretive Methods — RM (exclusion: SJE3929H)</td>
</tr>
<tr>
<td>SJE3417H</td>
<td>Research Seminar in Feminist Criticism, Aesthetics, and Pedagogy</td>
</tr>
<tr>
<td>SJE3903H</td>
<td>SJE Learning to Succeed in Graduate School</td>
</tr>
<tr>
<td>SJE3905H</td>
<td>Interdisciplinary Approaches to Research: Theory and Praxis</td>
</tr>
<tr>
<td>SJE3911H</td>
<td>Cultural Knowledges, Representation, and Colonial Education</td>
</tr>
<tr>
<td>SJE3912H</td>
<td>Race and Knowledge Production: Research Methods</td>
</tr>
<tr>
<td>SJE3914H</td>
<td>Anti-Colonial Thought and Pedagogical Challenges</td>
</tr>
<tr>
<td>SJE3915H</td>
<td>Franz Fanon and Education</td>
</tr>
<tr>
<td>SJE3916H</td>
<td>Women in Leadership Positions: Intersectionalities and Leadership Practices; Sociological Implications in Education</td>
</tr>
<tr>
<td>SJE3917H</td>
<td>Indigenous Land Education and Black Geographies (prerequisite: any prior Indigenous and/or Black Studies course(s); exclusion: SJE5007H)</td>
</tr>
<tr>
<td>SJE3933H</td>
<td>Globalisation and Transnationality: Feminist Perspectives</td>
</tr>
<tr>
<td>SJE3934H</td>
<td>Advanced Indigenous Feminist Research (prerequisite: prior coursework in Indigenous studies, women and gender studies; exclusion: SJE6000H)</td>
</tr>
<tr>
<td>SJE3997H</td>
<td>Practicum in Social Justice Education</td>
</tr>
<tr>
<td>SJE3998H</td>
<td>Individual Reading and Research in Sociology Justice Education</td>
</tr>
<tr>
<td>SJE6000H</td>
<td>Special Topics in Social Justice Research in Education: Doctoral Level</td>
</tr>
<tr>
<td>JSA5147H</td>
<td>Language, Nationalism, and Post-Nationalism</td>
</tr>
</tbody>
</table>
Social Work

Social Work: Introduction

Faculty Affiliation
Social Work

Degree Programs

Social Work

MSW

- Fields:
  - Children and Their Families;
  - Gerontology;
  - Health and Mental Health;
  - Human Services Management and Leadership;
  - Indigenous Trauma and Resiliency;
  - Social Justice and Diversity

PhD

Combined Degree Programs

- STG, Health Administration, MHSc / MSW (admissions have closed)
- STG, Law, JD / MSW
- UTSC, Mental Health Studies (Specialist), HBSc / MSW
- UTSC, Mental Health Studies (Specialist Co-op), HBSc / MSW

Diploma Programs

Advanced Diploma in Social Service Administration (admissions have closed)

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Social Work, MSW, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Social Work, MSW, PhD
- Bioethics
  - Social Work, PhD
- Community Development
  - Social Work, MSW
- Contemporary East and Southeast Asian Studies
  - Social Work, MSW
- Ethnic, Immigration and Pluralism Studies
  - Social Work, MSW, PhD

Overview

As the oldest school of social work in Canada, the Factor-Inwentash Faculty of Social Work at the University of Toronto has been on the cutting edge of education, policy, research, and practice in social work for almost 100 years. The Faculty offers a professional/academic program of study leading to Master of Social Work (MSW) and Doctor of Philosophy (PhD) degrees.

The mission of the Faculty at the University of Toronto has an international perspective that is influenced by its position within one of the top universities in North America located in a global metropolis. As such, the Faculty is committed to:

- Educating and developing professionals who have the capacity to engage in and influence our changing world through social work practice, policy, and research.
- Advancing research, practice, and policy that shapes the future of a profession that crosses national boundaries.
- Providing leadership by mobilizing knowledge that incorporates the range of expertise existing within the broader social work communities that exist internationally.
- Collaborating with our diverse partners to address social inequities at local, national, and global levels.

Contact and Address

Web: socialwork.utoronto.ca
Email: admissions.fsw@utoronto.ca
Telephone: (416) 978-6314
Fax: (416) 978-7072

Factor-Inwentash Faculty of Social Work
University of Toronto
246 Bloor Street West
Toronto, Ontario M5S 1V4
Canada

Social Work: Graduate Faculty

Full Members

Alaggia, Ramona - BA, MSW, PhD
Bhuyan, Rupaleem - BA, MA, PhD
Bogo, Marion - BA, MSW
Brennan, David - BA, MSW, PhD (Associate Dean, Research)
Burnes, David - MSW, PhD (Associate Dean, Academic)
Craig, Shelley - BS, MSW, PhD (Graduate Coordinator)
Fallon, Barbara - BA, MSW, PhD
Fang, Lin - BA, MSW, PhD (Director, PhD Program)
Fuller-Thomson, Esme - BA, MSW, PhD
Grenier, Amanda - MSW, PhD
Hulchanski, J David - BA, MSc, PhD
Lee, Eunjung - BSW, MSW, PhD
Logie, Carmen - BA, MSW, PhD
Mishna, Faye - BA, PhD
Newman, Peter - BA, MA, MSW, PhD
Regehr, Cheryl - AB, MA, PhD
Saini, Michael - BSW, BA, BA, MSW, PhD
Sakamoto, Izumi - DSW
Sharpe, Tanya - BA, MSW, PhD
Shier, Micheal - MSW, PhD
Stern, Susan - DSW
Trocme, Nicolas - PhD
Tsang, Ka Tat - BSc, PhD
Voisin, Dexter - MSW, MPH, PhD (Dean)
Williams, Charmaine - BA, BSc, MSW, PhD
Zuberi, Daniyal - BA, MSc, PhD

Members Emeriti

Bellamy, Donald - BA, BSW, MSW, DSW
Breton, Margot - BA, MSW
Chambron, Adrienne - BA, PhD
Gadalia, Tahany - BASc, MS, MMath, EdD
George, Usha - BSc, BEd, MA, MA, PhD
Irving, Howard - BS, MSW, DSW
MacFadden, Robert - BA, MSW, PhD
Marziali, Elsa - BA, MSW, DSW
McDonald, Lynn - PhD
Meeks, Donald - BA, MSW, DSW, Associate In Commerce
Neysmith, Sheila - BSc, MSW, DSW
Power, Roxanne - BA, BSW, MSW
Schlesinger, Benjamin - BA, MSW, PhD
Shapiro, Ben - BA, BSW, MSW, DSW
Shera, Wes - BA, MA, PhD
Wells, Lilian - BA, BSW, BA, MSW

Associate Members

Adam, Barry - PhD
Ansong, David - PhD
Ashcroft, Rachelle - MSW, PhD
Bay-Cheng, Laina Y. - PhD
Bouffet, Eric - MD
Dimitropoulos, Gina - BA, MSW, PhD
Dube, Eve - PhD
Flescher, Les - BA, MSW, DSW
Fluke, John - PhD
Ganson, Kyle - MSW, PhD
Gant, Larry - PhD
Gassoumis, Zachary - PhD
Graham, John R. - PhD
Handy, Femida - PhD
Hanley, Jill - PhD
Herie, Marilyn - BA, MSW, PhD
Ickowicz, Abel - MD
Jeffery, Donna - PhD
Katz, Ellen - BA, MSW, PhD
Lau, Anna S. - PhD
Levenson, Jill S. - PhD
Litvack, Andrea - BSW, MSW
MacDonald, Judy E. - PhD
McNeill, Ted - BA, MSc, DPhil

Muskat, Barbara - BSW, MSW, PhD
Nichols, Naomi - PhD
Quinn, Ashley - BSc, MSW, PhD
Rothwell, David - PhD
Sieppert, Jackie - PhD
Webhi, Samantha - PhD
Xue, Jia - BCL, MA, PhD
Yan, Miu Chung - PhD
Zhou, Yanqiu Rachel - PhD

Social Work: Social Work MSW

Master of Social Work

Program Description

The MSW program is distinguished by the integration of research and practice in both the classroom and its practicum education. The program offers six fields of specialization:

- Children and Their Families (MSW)
- Gerontology (MSW)
- Health and Mental Health (MSW)
- Human Services Management and Leadership (MSW)
- Indigenous Trauma and Resiliency (MSW)
- Social Justice and Diversity (MSW)

It is fully accredited by the Canadian Association for Social Work Education.

The Faculty of Social Work offers the Master of Social Work (MSW) program in a two-year option or an advanced-standing option for applicants entering with a Bachelor of Social Work (BSW) degree.

All students are expected to graduate with an advanced level of knowledge and professional competence in a chosen area of social work practice.

Social Work: Social Work MSW; Field: Children and Their Families

Master of Social Work (Field: Children and Their Families)

Within the MSW degree program, the field in Children and Their Families is designed to prepare students for social work practice with children and their families at all levels of intervention, from individual to group work with children, to family and couple intervention, to community organization, and to program and policy development.
Minimum Admission Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work’s additional admission requirements stated below.
- Applicants with an appropriate bachelor’s degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university are admitted to a two-year MSW program.
- Applicants who hold a BSW degree with mid-B average in the final year of full-time study, or its equivalent from a recognized university, may be eligible for the MSW advanced-standing option.
- All applicants must have included 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.
- Experience (voluntary or paid) in the social services or related field and knowledge of critical social issues are recommended. Suitability for professional practice in social work will also be considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field and a preference for full-time or part-time studies at the time of application.
- Initial admission inquiries should be made directly to the Faculty of Social Work. Please note that applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.

Program Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

- All MSW students: Agencies that offer practica will likely require a Vulnerable Sector Verification prior to commencing the practicum. Failure to pass this check will jeopardize a student’s entry to practicum. Cost and time factors are associated with the Vulnerable Sector Verification. A delay in obtaining the results can impact the start time of a student’s practicum. In anticipation of this requirement for the practicum, it is strongly recommended that students begin this process early.
- In the event that a student does not complete two or more required courses, or receives an FZ (inadequate) after repeating any course, normally steps will be taken by the Faculty to recommend the termination of the student’s registration.
- Students in the MSW two-year program must declare their field by mid-February of Year 1. See below for information by field.
- Note: Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.
- The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. Note: The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.
- Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.
- Students who choose the thesis option may require at least one additional academic session to complete the program.

MSW Two-Year Program

- Students must complete a total of 8.5 FCEs including core MSW coursework (4.0 FCEs), required field coursework

Compulsory Courses

Year 1 MSW students in the Children and Their Families field must complete eight half courses (4.0 FCEs) and the Year 1 practicum (0.5 FCE) from the list of required courses below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4102H</td>
<td>Social Policy and Social Welfare in the Canadian Context</td>
</tr>
<tr>
<td>SWK4103H</td>
<td>Elements of Social Work Practice</td>
</tr>
<tr>
<td>SWK4105H</td>
<td>Social Work Practice Laboratory</td>
</tr>
<tr>
<td>SWK4107H</td>
<td>Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)</td>
</tr>
<tr>
<td>SWK4602H</td>
<td>Social Work Practice with Groups</td>
</tr>
<tr>
<td>SWK4605H</td>
<td>Social Work Practice with Individuals and Families</td>
</tr>
<tr>
<td>SWK4654H</td>
<td>Social Work Practice in Organizations and Communities</td>
</tr>
<tr>
<td>SWK4701H+</td>
<td>Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)</td>
</tr>
</tbody>
</table>

+ Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

- Students in the MSW two-year program must declare their field by mid-February of Year 1. See below for information by field.
- Note: Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.
- The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. Note: The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.
- Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.
- Students who choose the thesis option may require at least one additional academic session to complete the program.
(2.0 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs). The practicum (0.5 FCE) is required for students in Year 1 and is offered in the Winter session; the Year 2 practicum (September to April) is equivalent to 1.0 FCE and must be in the student's field.

- **Thesis:** Students complete a total of 8.5 FCEs, including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

**MSW Advanced-Standing Option**

- Students will normally complete a total of 4.5 FCEs including required coursework (2.5 FCEs), elective coursework (1.0 FCE), and a practicum (1.0 FCE) in their field.
- **Thesis:** Students complete a total of 4.5 FCEs including required coursework (2.5 FCEs), a practicum (1.0 FCE), and a thesis (1.0 FCE).

**Compulsory Courses — Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4514H</td>
<td>Research for Practice with Children and their Families</td>
</tr>
<tr>
<td>SWK4608H</td>
<td>Social Work Practice with Families</td>
</tr>
<tr>
<td>SWK4620H</td>
<td>Social Work Practice with Children and Adolescents</td>
</tr>
<tr>
<td>SWK4625H</td>
<td>The Intersection of Policy and Practice with Children and their Families</td>
</tr>
<tr>
<td>SWK4702Y</td>
<td>Social Work Practicum II (full credit)</td>
</tr>
</tbody>
</table>

- **Students in the advanced-standing option** must complete the above courses plus a compulsory course: SWK4510H Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field).

**Program Length**

6 sessions two-year full-time (typical registration sequence: F/W/S/F/W/S);
3 sessions advanced-standing full-time (typical registration sequence: F/W/S);
6 sessions advanced-standing part-time

**Time Limit**

3 years full-time;
6 years part-time

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**Social Work: Social Work MSW; Field: Gerontiology**

**Master of Social Work (Field: Gerontology)**

Social workers provide a wide variety of services and programs, both in the community and in institutions that are aimed at enhancing the quality of life of older people and assisting families to adjust to the aging of their family member. Social workers also play a vital role in the development and implementation of social and economic policies at the provincial and national levels through research on aging, consultation with government, and through social advocacy.

All students enrolled in the Social Work in Gerontology field will automatically be enrolled in the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course.

**Minimum Admission Requirements**

**MSW Two-Year Program and MSW Advanced-Standing Option**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work's additional admission requirements stated below.
- Applicants with an appropriate bachelor's degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university are admitted to a two-year MSW program.
- Applicants who hold a BSW degree with mid-B average in the final year of full-time study, or its equivalent from a recognized university, may be eligible for the MSW advanced-standing option.
- All applicants must have included 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.
- Experience (voluntary or paid) in the social services or related field and knowledge of critical social issues are recommended. Suitability for professional practice in social work will also be considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field and a preference for full-time or part-time studies at the time of application.
- Initial admission inquiries should be made directly to the Faculty of Social Work. Please note that applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.
Program Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

- All MSW students: Agencies that offer practica will likely require a Vulnerable Sector Verification prior to commencing the practicum. Failure to pass this check will jeopardize a student's entry to practicum. Cost and time factors are associated with the Vulnerable Sector Verification. A delay in obtaining the results can impact the start time of a student's practicum. In anticipation of this requirement for the practicum, it is strongly recommended that students begin this process early.
- In the event that a student does not complete two or more required courses, or receives an FZ (inadequate) after repeating any course, normally steps will be taken by the Faculty to recommend the termination of the student's registration.

Compulsory Courses

Year 1 MSW students in the Gerontology field must complete eight half courses (4.0 FCEs) and the Year 1 practicum (0.5 FCE) from the list of required courses below. Students in the Indigenous Trauma and Resiliency field should consult the specific course requirements listed separately in this entry.

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
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<tbody>
<tr>
<td>SWK4102H</td>
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<td>Elements of Social Work Practice</td>
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<tr>
<td>SWK4105H</td>
<td>Social Work Practice Laboratory</td>
</tr>
<tr>
<td>SWK4107H</td>
<td>Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)</td>
</tr>
<tr>
<td>SWK4602H</td>
<td>Social Work Practice with Groups</td>
</tr>
<tr>
<td>SWK4605H</td>
<td>Social Work Practice with Individuals and Families</td>
</tr>
<tr>
<td>SWK4654H</td>
<td>Social Work Practice in Organizations and Communities</td>
</tr>
<tr>
<td>SWK4701H*</td>
<td>Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

- Students in the MSW two-year program must declare their field by mid-February of Year 1.
- **Note:** Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.
- The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. **Note:** The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.
- Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.
- Students who choose the thesis option may require at least one additional academic session to complete the program.

MSW Two-Year Program

- Students in the MSW two-year program must complete a total of **9.0 FCEs**, including core MSW coursework (4.0 FCEs), required field coursework (2.5 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs) in the student's field.
- Thesis: Students in the two-year MSW program complete a total of **9.0 FCEs**, including core MSW coursework (4.0 FCEs), required field coursework (2.5 FCEs), elective coursework (1.0 FCE, 0.5 of which must be from the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course listing), the Year 1 practicum (0.5 FCE), and a thesis (1.0 FCE).

MSW Advanced-Standing Option

- Students in the MSW advanced-standing option will normally complete a total of **5.0 FCEs**, including required coursework (3.0 FCEs), elective coursework (1.0 FCE), and a practicum (1.0 FCE).
- Thesis: Students in the MSW advanced-standing option complete a total of **5.0 FCEs**, including required coursework (3.0 FCEs), elective coursework (1.0 FCE, 0.5 of which must be from the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course listing), and a thesis (1.0 FCE).

Compulsory Courses — Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE2000H</td>
<td>Principles of Aging</td>
</tr>
<tr>
<td>SWK4513H</td>
<td>Knowledge Building in Social Work</td>
</tr>
<tr>
<td>SWK4612Y</td>
<td>Social Work and Aging: Integrated Policy and Practice (full credit)</td>
</tr>
<tr>
<td>SWK4618H</td>
<td>Special Issues in Gerontological Social Work</td>
</tr>
<tr>
<td>SWK4702Y</td>
<td>Social Work Practicum II (full credit)</td>
</tr>
</tbody>
</table>

- Students in the MSW advanced-standing option must complete the above courses plus a compulsory course: SWK4510H Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field).
Program Length

6 sessions two-year full-time (typical registration sequence: F/W/S/F/W/S);
3 sessions advanced-standing full-time (typical registration sequence: F/W/S);
6 sessions advanced-standing part-time

Time Limit

3 years full-time;
6 years part-time

Social Work: Social Work MSW; Field: Health and Mental Health

Master of Social Work (Field: Health and Mental Health)

As members of inter-professional health teams, social workers seek to assist others in understanding the social and community context in which physical and mental illness occur, and the way in which these larger systems contribute to the development of illness and disability and exacerbate or ameliorate the challenges in adapting to illness and living with disability.

Minimum Admission Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work’s additional admission requirements stated below.
- Applicants with an appropriate bachelor’s degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university are admitted to a two-year MSW program.
- Applicants who hold a BSW degree with mid-B average in the final year of full-time study, or its equivalent from a recognized university, may be eligible for the MSW advanced-standing option.
- All applicants must have included 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.
- Experience (voluntary or paid) in the social services or related field and knowledge of critical social issues are recommended. Suitability for professional practice in social work will also be considered.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field and a preference for full-time or part-time studies at the time of application.
- Initial admission inquiries should be made directly to the Faculty of Social Work. Please note that applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.

Program Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

- All MSW students: Agencies that offer practica will likely require a Vulnerable Sector Verification prior to commencing the practicum. Failure to pass this check will jeopardize a student's entry to practicum. Cost and time factors are associated with the Vulnerable Sector Verification. A delay in obtaining the results can impact the start time of a student's practicum. In anticipation of this requirement for the practicum, it is strongly recommended that students begin this process early.
- In the event that a student does not complete two or more required courses, or receives an FZ (inadequate) after repeating any course, normally steps will be taken by the Faculty to recommend the termination of the student's registration.

Compulsory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4102H</td>
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</tr>
<tr>
<td>SWK4103H</td>
<td>Elements of Social Work Practice</td>
</tr>
<tr>
<td>SWK4105H</td>
<td>Social Work Practice Laboratory</td>
</tr>
<tr>
<td>SWK4107H</td>
<td>Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)</td>
</tr>
<tr>
<td>SWK4602H</td>
<td>Social Work Practice with Groups</td>
</tr>
<tr>
<td>SWK4605H</td>
<td>Social Work Practice with Individuals and Families</td>
</tr>
<tr>
<td>SWK4654H</td>
<td>Social Work Practice in Organizations and Communities</td>
</tr>
<tr>
<td>SWK4701H*</td>
<td>Social Work Practicum 1 (prerequisite: SWK4105H completed prior to beginning practicum)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

- Students in the MSW two-year program must declare their field by mid-February of Year 1.
- Note: Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.
• The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. Note: The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.

• Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.

• Students who choose the thesis option may require at least one additional academic session to complete the program.

**MSW Two-Year Program**

• Students in the MSW two-year program must complete a total of 8.5 FCEs including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs). The practicum (0.5 FCE) is required for students in Year 1 and is offered in the Winter session; the Year 2 practicum (September to April) is equivalent to 1.0 FCE and must be in the student’s field.

• Thesis: Students in the MSW two-year program complete a total of 8.5 FCEs, including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

**MSW Advanced-Standing Option**

• Students in the MSW advanced-standing option will normally complete a total of 4.5 FCEs including required coursework (2.5 FCEs), elective coursework (1.0 FCE), and a practicum (1.0 FCE) in their field.

• Thesis: Students in the MSW advanced-standing option complete a total of 4.5 FCEs including required coursework (2.5 FCEs), a practicum (1.0 FCE), and a thesis (1.0 FCE).

**Compulsory Courses — Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4412H</td>
<td>The Context of Mental Health and Health Practice</td>
</tr>
<tr>
<td>SWK4511H</td>
<td>Practice-Based Research in Mental Health and Health</td>
</tr>
<tr>
<td>SWK4702Y</td>
<td>Social Work Practicum II (full credit)</td>
</tr>
</tbody>
</table>

• Plus students can then elect to take one of three choices:
  o SWK4622H Social Work Practice in Health and SWK4604H Social Work Practice in Mental Health
  o SWK4622H Social Work Practice in Health followed by SWK4632H Advanced Social Work Practice in Health (prerequisite: SWK4622H)
  o SWK4604H Social Work Practice in Mental Health followed by SWK4631H Advanced Social Work Practice in Mental Health (prerequisite: SWK4604H)

• Students in the MSW advanced-standing option must complete the above courses plus a compulsory course: SWK4510H Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field).

**Program Length**

6 sessions two-year full-time (typical registration sequence: F/W/S/F/W/S);
3 sessions advanced-standing full-time (typical registration sequence: F/W/S);
6 sessions advanced-standing part-time

**Time Limit**

3 years full-time;
6 years part-time

**Social Work: Social Work MSW; Field: Human Services Management and Leadership**

**Master of Social Work (Field: Human Services Management and Leadership)**

The not-for-profit sector is primarily responsible for the delivery of social services in Canada. There is a critical need for people who are able to assume leadership roles in the community social services sector.

**Minimum Admission Requirements**

**MSW Two-Year Program and MSW Advanced-Standing Option**

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work’s additional admission requirements stated below.

• Applicants with an appropriate bachelor’s degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university are admitted to a two-year MSW program.

• Applicants who hold a BSW degree with mid-B average in the final year of full-time study, or its equivalent from a recognized university, may be eligible for the MSW advanced-standing option.

• Students applying to the Human Services Management and Leadership field must have at least two years of volunteer or work experience in human services.

• All applicants must have included 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.
• Experience (voluntary or paid) in the social services or related field and knowledge of critical social issues are recommended. Suitability for professional practice in social work will also be considered.

• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field and a preference for full-time or part-time studies at the time of application.

• Initial admission inquiries should be made directly to the Faculty of Social Work. Please note that applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.

Program Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

• All MSW students: Agencies that offer practica will likely require a Vulnerable Sector Verification prior to commencing the practicum. Failure to pass this check will jeopardize a student’s entry to practicum. Cost and time factors are associated with the Vulnerable Sector Verification. A delay in obtaining the results can impact the start time of a student’s practicum. In anticipation of this requirement for the practicum, it is strongly recommended that students begin this process early.

• In the event that a student does not complete two or more required courses, or receives an FZ (inadequate) after repeating any course, normally steps will be taken by the Faculty to recommend the termination of the student’s registration.

Compulsory Courses

Year 1 MSW students in the Human Services Management and Leadership field must complete eight half courses (4.0 FCEs) and the Year 1 practicum (0.5 FCE) from the list of required courses below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4102H</td>
<td>Social Policy and Social Welfare in the Canadian Context</td>
</tr>
<tr>
<td>SWK4103H</td>
<td>Elements of Social Work Practice</td>
</tr>
<tr>
<td>SWK4105H</td>
<td>Social Work Practice Laboratory</td>
</tr>
<tr>
<td>SWK4107H</td>
<td>Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)</td>
</tr>
<tr>
<td>SWK4602H</td>
<td>Social Work Practice with Groups</td>
</tr>
<tr>
<td>SWK4605H</td>
<td>Social Work Practice with Individuals and Families</td>
</tr>
<tr>
<td>SWK4654H</td>
<td>Social Work Practice in Organizations and Communities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4701H</td>
<td>Social Work Practicum 1 (prerequisite: SWK4105H completed prior to beginning practicum)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

• Students in the MSW two-year program must declare their field by mid-February of Year 1.

• Note: Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.

• The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. Note: The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.

• Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.

• Students who choose the thesis option may require at least one additional academic session to complete the program.

MSW Two-Year Program

• Students in the MSW two-year program must complete a total of 8.5 FCEs including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs). The practicum (0.5 FCE) is required for students in Year 1 of the MSW two-year program and is offered in the Winter session; the Year 2 practicum (September to April) is equivalent to 1.0 FCE and must be in the student’s field.

• Students in the Human Services Management and Leadership field do not have the option of doing a thesis.

MSW Advanced-Standing Option

• Students in the MSW advanced-standing option will normally complete a total of 4.5 FCEs including required coursework (2.5 FCEs), elective coursework (1.0 FCE), and a practicum (1.0 FCE) in their field.

Compulsory Courses — Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4425H</td>
<td>Human Services Management and Leadership</td>
</tr>
<tr>
<td>SWK4426H</td>
<td>Financial Management and Leadership in Human Service Organizations</td>
</tr>
<tr>
<td>SWK4427H</td>
<td>Human Resource Management in Human Service Organizations</td>
</tr>
</tbody>
</table>
• Students in the MSW advanced-standing option must complete the above courses plus a compulsory course: SWK4510H Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field.)

Program Length

6 sessions two-year full-time (typical registration sequence: F/W/S/F/W/S);
3 sessions advanced-standing full-time (typical registration sequence: F/W/S);
6 sessions advanced-standing part-time

Time Limit

3 years full-time;
6 years part-time

Social Work: Social Work MSW; Field: Indigenous Trauma and Resiliency

Master of Social Work (Field: Indigenous Trauma and Resiliency)

The Indigenous Trauma and Resiliency field integrates theory and research drawn from social work and Indigenous knowledge for application in the delivery of services and interventions for Indigenous populations. There is an emphasis on the First Nations, Métis, and Inuit peoples of Canada and other Indigenous groups. The curriculum is offered through online and intensive classroom formats.

Initial admission inquiries should be made directly to the Factor-Inwentash Faculty of Social Work. Applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.

This field is offered only as a two-year, full-time program.

Minimum Admission Requirements

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Factor-Inwentash Faculty of Social Work’s additional admission requirements stated below.

• Applicants with an appropriate bachelor’s degree or Bachelor of Social Work (BSW) degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university can be admitted to this field.

• All applicants must have completed 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.

• Three years of experience (voluntary or paid) in the social services or related field and knowledge of critical social issues. Suitability for professional practice in social work will also be considered.

• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

• Applicants must submit a resumé and demonstrate at least three years of experience in social services, preferably working with Aboriginal or Indigenous communities.

• Applicants may be asked to complete an admissions interview in person or by Skype as part of the application process.

Program Requirements

• Students must complete 7.5 FCEs as follows:
  ○ Year 1: seven half courses (3.5 FCEs)
  ○ Year 2:
    ▪ six half courses (3.0 FCEs) and
    ▪ a 450-hour summer practicum (1.0 FCE).

• Students entering the program with BA or BASc courses must complete an additional 1.0 FCE (two half courses SWK4102H and SWK4516H [summer practicum]) in Year 1.

• Students are expected to submit a Vulnerable Sector Verification by June 1 prior to the course registration. It is strongly recommended that students begin this process early.

Year 1 Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4101H</td>
<td>Understanding Historical and Multigenerational Trauma</td>
</tr>
<tr>
<td>SWK4102H</td>
<td>Social Policy and Social Welfare in the Canadian Context</td>
</tr>
<tr>
<td>SWK4106H</td>
<td>Social Work Ethics and Indigenous Communities</td>
</tr>
<tr>
<td>SWK4108H</td>
<td>Sexual Abuse, Sexual Assault, and the Family</td>
</tr>
<tr>
<td>SWK4109H</td>
<td>Trauma and Human Development</td>
</tr>
<tr>
<td>SWK4110H</td>
<td>Trauma and Addiction</td>
</tr>
<tr>
<td>SWK4111H</td>
<td>Trauma-Informed Schools, Community Intervention, and the Healing Power of Ceremony</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice</td>
</tr>
<tr>
<td>SWK4516H</td>
<td>Indigenous Trauma and Resiliency Practicum</td>
</tr>
</tbody>
</table>

Year 2 Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4517H</td>
<td>Indigenous and Participatory Research Methods</td>
</tr>
</tbody>
</table>
SWK4703Y MSW ITR Practicum III
SWK4901H Facilitating Training in Indigenous Communities
SWK4902H Indigenous Perspectives on Grief, Loss, and Unattended Sorrow
SWK4903H Trauma-Informed Care, Organizations, Supervision, and Leadership
SWK4904H Working with Couples and Families in Indigenous Context
SWK4905H Seeing the Need, Creating the Solution

Program Length
6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit
3 years full-time

Social Work: Social Work MSW; Field: Social Justice and Diversity

Master of Social Work (Field: Social Justice and Diversity)

Reducing inequalities and marginalization is in line with professional social work’s agenda of anti-oppression and social justice. Social work is committed to working with and on behalf of people from disenfranchised backgrounds.

Minimum Admission Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

• Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work’s additional admission requirements stated below.
• Applicants with an appropriate bachelor’s degree with a minimum average equivalent to at least a University of Toronto mid-B in the final year of full-time study from a recognized university are admitted to a two-year MSW program.
• Applicants who hold a BSW degree with mid-B average in the final year of full-time study, or its equivalent from a recognized university, may be eligible for the MSW advanced-standing option.
• All applicants must have included 3.0 full-course equivalents (FCEs) in social science courses, including 0.5 FCE in research methodology. A mid-B is strongly recommended in the research methodology course.
• Experience (voluntary or paid) in the social services or related field and knowledge of critical social issues are recommended. Suitability for professional practice in social work will also be considered.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field and a preference for full-time or part-time studies at the time of application.
• Initial admission inquiries should be made directly to the Faculty of Social Work. Please note that applicants holding the minimum admission requirements are not guaranteed admission. All admission decisions are final.

Program Requirements

MSW Two-Year Program and MSW Advanced-Standing Option

• All MSW students: Agencies that offer practica will likely require a Vulnerable Sector Verification prior to commencing the practicum. Failure to pass this check will jeopardize a student’s entry to practicum. Cost and time factors are associated with the Vulnerable Sector Verification. A delay in obtaining the results can impact the start time of a student’s practicum. In anticipation of this requirement for the practicum, it is strongly recommended that students begin this process early.
• In the event that a student does not complete two or more required courses, or receives an FZ (inadequate) after repeating any course, normally steps will be taken by the Faculty to recommend the termination of the student’s registration.

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</tr>
<tr>
<td>SWK4103H</td>
<td>Elements of Social Work Practice</td>
</tr>
<tr>
<td>SWK4105H</td>
<td>Social Work Practice Laboratory</td>
</tr>
<tr>
<td>SWK4107H</td>
<td>Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice</td>
</tr>
<tr>
<td>SWK4510H</td>
<td>Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)</td>
</tr>
<tr>
<td>SWK4602H</td>
<td>Social Work Practice with Groups</td>
</tr>
<tr>
<td>SWK4605H</td>
<td>Social Work Practice with Individuals and Families</td>
</tr>
<tr>
<td>SWK4654H</td>
<td>Social Work Practice in Organizations and Communities</td>
</tr>
<tr>
<td>SWK4701H*</td>
<td>Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
• Students in the MSW two-year program must declare their field by mid-February of Year 1.

• **Note:** Advanced-standing students normally complete the program in one year of full-time study or two years of part-time study.

• The MSW thesis option provides hands-on research experience. The thesis is an independent piece of research intended to enable students to develop and apply research skills within the context of social work practice and to write a graduate thesis of publishable quality. **Note:** The thesis option is available to a limited number of students — maximum three in any given year — whose proposed research must be approved by a review panel and by the Associate Dean, Research.

• Students in the thesis option who have a minimum of two years’ prior full-time social work experience are eligible to apply to take an additional 1.0 elective FCE in place of the Year 2 practicum. Workplace supervision must have occurred with an MSW supervisor; requests for substitution must be reviewed and approved by the Faculty Assessment Committee.

• Students who choose the thesis option may require at least one additional academic session to complete the program.

**MSW Two-Year Program**

• Students must complete a total of **8.5 FCEs** including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), elective coursework (1.0 FCE), and practica (1.5 FCEs). The practicum (0.5 FCE) is required for students in Year 1 and is offered in the Winter session; the Year 2 practicum (September to April) is equivalent to 1.0 FCE and must be in the student’s field.

• Thesis: Students complete a total of **8.5 FCEs**, including core MSW coursework (4.0 FCEs), required field coursework (2.0 FCEs), practica (1.5 FCEs), and a thesis (1.0 FCE).

**MSW Advanced-Standing Option**

• Students in the MSW advanced-standing option will normally complete a total of **4.5 FCEs** including required coursework (2.5 FCEs), elective coursework (1.0 FCE), and a practicum (1.0 FCE) in their field.

• Thesis: Students complete a total of **4.5 FCEs** including required coursework (2.5 FCEs), a practicum (1.0 FCE), and a thesis (1.0 FCE).

**Compulsory Courses — Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4304H</td>
<td>Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally</td>
</tr>
<tr>
<td>SWK4306H</td>
<td>Theoretical Approaches to Defining Social Injustice and Engaging in Social Change</td>
</tr>
<tr>
<td>SWK4512H</td>
<td>Research Knowledge for Social Justice</td>
</tr>
<tr>
<td>SWK4606H</td>
<td>Diversity, Access, and Equity in Social Work Practice</td>
</tr>
<tr>
<td>SWK4702Y</td>
<td>Social Work Practicum II (full credit)</td>
</tr>
</tbody>
</table>

**Social Work: Social Work MSW Courses**

**Elective Courses**

Courses are offered in various areas of social work practice. The choice of electives in any given year is contingent on available faculty resources. Not every course is given in any one year. Please consult the Faculty of Social Work website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE2000H</td>
<td>Principles of Aging</td>
</tr>
<tr>
<td>EIP3000H</td>
<td>Coordinating Seminar: Ethnic, Immigration and Pluralism Studies</td>
</tr>
<tr>
<td>PAS3700H</td>
<td>Multidisciplinary Aspects of Addictions</td>
</tr>
<tr>
<td>SWK4210H</td>
<td>Promoting Empowerment: Working at the Margins</td>
</tr>
<tr>
<td>SWK4417H</td>
<td>Adolescence: Social Work Challenges and the Role of Social Work</td>
</tr>
<tr>
<td>SWK4420H</td>
<td>Human Rights and Social Justice</td>
</tr>
<tr>
<td>SWK4422H</td>
<td>Social Housing and Homelessness</td>
</tr>
<tr>
<td>SWK4506H</td>
<td>Applied Quantitative Data Analysis</td>
</tr>
<tr>
<td>SWK4516H</td>
<td>Indigenous Trauma and Resiliency Practicum</td>
</tr>
<tr>
<td>SWK4610H</td>
<td>Advanced Social Work Practice with Couples</td>
</tr>
<tr>
<td>SWK4614H</td>
<td>Social Work Practice in Palliative Care</td>
</tr>
<tr>
<td>SWK4615H</td>
<td>Cognitive Behavioural Theories and Clinical Social Work Practice</td>
</tr>
<tr>
<td>SWK4616H</td>
<td>Drug Dependencies: Interventive Approaches</td>
</tr>
<tr>
<td>SWK4619H</td>
<td>Family Mediation: Theory and Practice</td>
</tr>
<tr>
<td>SWK4623H</td>
<td>Violence in Families: Multilevel Intervention in Interdisciplinary Practice</td>
</tr>
<tr>
<td>SWK4624H</td>
<td>Feminist Social Work Practice</td>
</tr>
</tbody>
</table>
Social Work: Social Work PhD

Doctor of Philosophy

Program Description

The PhD program has a tradition of scholarly excellence based on the quality of the research knowledge, competence, and output of its faculty. Doctoral graduates are practice leaders and faculty members throughout the world. Enrolment in the Faculty of Social Work entails adherence to the standards of professional behaviour for the social work profession set forth in the Social Work Code of Ethics of the Canadian Association of Social Workers.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the graduate unit's additional admission requirements stated below.
- Master of Social Work degree or an equivalent master's degree with at least a B+ standing from an accredited program in a recognized university.
- Competency in basic statistical methods at an introductory level.
- Educational and professional experience that indicates a capacity to undertake research-oriented post-graduate work.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements. Advanced-standing applicants must declare their field of specialization and a preference for full-time or part-time studies at the time of application.
- Initial admission inquiries should be made directly to the Faculty of Social Work. The application deadline for the PhD program is December 1. The Faculty of Social Work does not guarantee admission to all applicants who meet its minimum requirements.

Program Requirements

- **Coursework.** Students must complete a total of 5.5 full-course equivalents (FCEs), generally within two years of registration, as follows:
  - 2.0 FCEs in required research courses:
    - SWK6301H Intermediate Statistics and Data Analysis (0.5 FCE)
    - SWK6302H Epistemology and Social Work Research (0.5 FCE)
    - SWK6307H Designing and Implementing Qualitative Social Work Research (0.5 FCE)
    - SWK6308H Designing and Implementing Quantitative Social Work Research (0.5 FCE)
  - Students may be exempt from these research courses but will substitute alternate elective courses for each exempted course. Note: SWK4506H (0.5 FCE) is a prerequisite for SWK6301H, or an equivalent competency exam must be passed by all incoming students with a grade of A.

Special Studies

Special Studies courses are designed to provide seminars or tutorials under the direction of a faculty member. The focus is on a topic of particular interest to the student which is not included in available courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4801H</td>
<td>Special Studies I</td>
</tr>
<tr>
<td>SWK4802H</td>
<td>Special Studies II</td>
</tr>
<tr>
<td>SWK4803H</td>
<td>Special Studies III</td>
</tr>
<tr>
<td>SWK4804H</td>
<td>Special Studies IV</td>
</tr>
</tbody>
</table>
2.5 FCEs in graduate-level electives, including at least 0.5 FCE from Social Work and at least 0.5 FCE from another graduate unit (with the approval of the PhD Director).

- SWK7000H Doctoral Thesis Seminar (Credit/No Credit) (0.5 FCE) is required during the Fall session of Year 2.
- Year 1 PhD students will attend a mandatory Year 1 colloquium during the Winter session (two full days), no credit.
- Following completion of at least nine of the above courses, students must satisfactorily complete SWK8000H Comprehensive Exam (Credit/No Credit) (0.5 FCE) during the Winter session of Year 2.

- Following completion of all coursework, students must satisfactorily complete:
  - a thesis proposal,
  - a thesis, which can be in the traditional thesis format, which constitutes a distinct contribution to knowledge in the field of social work, or
  - a three-paper option based on the same fundamental principles of independent student work and scholarly rigour. The three-paper dissertation option allows students to write three related papers in a given topic or area of interest in which they have conducted research as required for the PhD program.
- and finally, an oral thesis defence.

- Students are expected to complete their coursework, comprehensive paper, and have their thesis proposal approved by the end of August of Year 3. The research, writing, and Doctoral Final Oral Examination of the thesis are typically completed by the end of Year 5.
- Students must have an adequate knowledge of a language other than English if an additional language is deemed essential for satisfactory completion of research for the thesis. The Faculty is responsible for ensuring that an acceptable certificate of language competence is deposited with the School of Graduate Studies.
- In the event that a student does not complete two or more required courses (excluding SWK8000H Comprehensive Exam), or receives an FZ (inadequate) after repeating any course, the Faculty will take steps to recommend the termination of the student's registration.
- In the event that a student receives an NCR (No Credit) for SWK8000H Comprehensive Exam, the Faculty will take steps to recommend the termination of the student's registration.

### Program Length

- **4 years**

### Time Limit

- **6 years**

---

### Social Work: Social Work PhD Courses

#### Compulsory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK6301H</td>
<td>Intermediate Statistics and Data Analysis (prerequisite: SWK4506H or pass a competency exam)</td>
</tr>
<tr>
<td>SWK6302H</td>
<td>Epistemology and Social Work Research</td>
</tr>
<tr>
<td>SWK6307H</td>
<td>Designing and Implementing Qualitative Social Work Research</td>
</tr>
<tr>
<td>SWK6308H</td>
<td>Designing and Implementing Quantitative Social Work Research</td>
</tr>
<tr>
<td>SWK7000H</td>
<td>Doctoral Thesis Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>SWK8000H</td>
<td>Comprehensive Exam (Credit/No Credit)</td>
</tr>
</tbody>
</table>

#### Recommended Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4506H</td>
<td>Applied Quantitative Data Analysis (prerequisite for SWK6301H; students who pass a competency exam will be exempted from taking SWK4506H)</td>
</tr>
</tbody>
</table>

#### Elective Courses

The choice of electives in any given year is contingent on available faculty resources. Not every course is available in any one year. Please consult the Faculty of Social Work website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK6006H</td>
<td>Theory and Practice of Teaching Social Work</td>
</tr>
<tr>
<td>SWK6007H</td>
<td>Advanced Qualitative Research Methods in Social Work</td>
</tr>
<tr>
<td>SWK6101H</td>
<td>Critical Evaluation of Social Work Practice Theories</td>
</tr>
<tr>
<td>SWK6106H</td>
<td>Family Mediation: Research and Practice</td>
</tr>
<tr>
<td>SWK6203H</td>
<td>Comparative Social Welfare Systems</td>
</tr>
<tr>
<td>SWK6205H</td>
<td>Social Planning in Social Welfare</td>
</tr>
<tr>
<td>SWK6401H</td>
<td>Sociocultural Issues in Social Work</td>
</tr>
<tr>
<td>SWK6406H</td>
<td>Housing Theory and Research Methods</td>
</tr>
</tbody>
</table>

These courses are designed to provide seminars or tutorials according to the particular interests of students enrolled:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK6501H</td>
<td>Special Studies 1</td>
</tr>
<tr>
<td>SWK6502H</td>
<td>Special Studies 2</td>
</tr>
<tr>
<td>SWK6503H</td>
<td>Special Studies 3</td>
</tr>
<tr>
<td>SWK6504H</td>
<td>Special Studies 4</td>
</tr>
</tbody>
</table>
Social Work: Social Work Advanced Diploma in Social Service Administration

Admissions to this diploma program have closed.

The goal of this program is to provide a rigorous, comprehensive grounding in the key values, skills, and knowledge required by administrators, managers, and leaders of social service organizations. The diploma program is designed for students who are active in the work force.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Social Work’s additional admission requirements stated below.
- Applicants must have an MSW or master's degree in a related social service field and have at least three years of experience in social services.

Program Requirements

- Students must complete 3.0 full-course equivalents (FCEs) offered in modular format one full day per month.

Program Length

3 sessions (1 year) full-time;
6 sessions (2 years) part-time

Time Limit

5 years full-time;
5 years part-time

Elective Courses

1.0 elective full-course equivalent (FCE) taken in conjunction with the MSW curriculum or 0.5 elective FCE and a major paper addressing a funding, management, or structural challenge in a social service agency.

Social Work: Social Work Advanced Diploma in Social Service Administration Courses

Compulsory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4425H</td>
<td>Leadership Skills in Social Service Organizations</td>
</tr>
<tr>
<td>SWK4426H</td>
<td>Financial Management of Social Service Organizations</td>
</tr>
<tr>
<td>SWK4427H</td>
<td>Human Resource Management in Social Service Organizations</td>
</tr>
<tr>
<td>SWK4515H</td>
<td>Research and Quality Improvement in Human Service Organizations</td>
</tr>
</tbody>
</table>
Sociology

Sociology: Introduction

Faculty Affiliation
Arts and Science

Degree Programs
Sociology
MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Addiction Studies
  - Sociology, MA, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Sociology, MA, PhD
- Contemporary East and Southeast Asian Studies
  - Sociology, MA
- Development Policy and Power
  - Sociology, MA
- Diaspora and Transnational Studies
  - Sociology, MA, PhD
- Environmental Studies
  - Sociology, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - Sociology, MA, PhD
- Food Studies
  - Sociology, MA, PhD
- Jewish Studies
  - Sociology, MA, PhD
- Sexual Diversity Studies
  - Sociology, MA, PhD
- Women and Gender Studies
  - Sociology, MA, PhD

Overview

The Department of Sociology is consistently the top-ranked sociology department in Canada, with internationally renowned scholars who have an excellent track record for securing research funding, producing outstanding sociological research, and mentoring graduate students extensively. A collegial atmosphere encourages innovation and rigour in research and teaching. The community of scholars includes faculty members, outstanding postdoctoral scholars, and creative and engaged graduate students.

The department's graduate programs provide exceptional training to students in advanced social research. The focus is on transforming graduate students from consumers of academic research into producers of new sociological knowledge. To that end, there is a strong focus on methodological training; graduate students are integrated thoroughly into the faculty research programs in the department.

Contact and Address
Web: www.sociology.utoronto.ca
Email: sociology.graduate@utoronto.ca or socgrad.assist@utoronto.ca
Telephone: (416) 978-3414
Fax: (416) 978-3963

Department of Sociology
University of Toronto
725 Spadina Avenue
Toronto, Ontario M5S 2J4
Canada

Sociology: Graduate Faculty

Full Members

Baber, Zaheer - PhD
Baumann, Shyon - BA, MA, PhD
Berrey, Ellen - AB, PhD
Berry, Brent - BS, PhD
Boyd, Monica - BA, MA, PhD
Bryant, Joseph - BA, MA, PhD
Brym, Robert - BA, MA, PhD
Childress, Clayton - BA, MA, PhD
Choo, Hae Yeon - BA, MA, PhD
Cranford, Cynthia - MA, PhD
Dinovitzer, Ronit - BA, MA, PhD
Erickson, Bonnie - BA, MA, PhD
Erickson, Patricia - BA, MA, PhD
Farah Schwartzman, Luisa - PhD
Fields, Jessica - BA, MA, MA, PhD
Fox, Bonnie - AB, PhD
Goodman, Philip - BA, MA, PhD
Green, Adam - BA, MA, MSS, PhD
Hannigan, John - BA, MA, PhD
Hermer, Joseph - PhD
Hsiung, Ping-Chun - PhD
Johnston, Josee - AB, MA, PhD
Kervin, John - BA, PhD
Korteweg, Anna - BA, MA, PhD
Kruttschnitt, Candace - BA, MA, MPH, PhD
Landolt, Patricia - BA, MA, PhD
Lee, Jooyoung - BA, MA, PhD
Lee, Yoonkyung - BPhil, MA, PhD
Leschziner, Vanina - BA, BA, AM, DPhil
Levi, Ron - BCL, LLB, LLM, SJD
Liu, Sida - LLB, PhD
Magee, William - PhD
Maghbouleh, Neda - BA, MA, PhD
Maurutto, Paula - DPhil
Milkie, Melissa - BA, MA, PhD
Mullen, Ann Louise - BA, MA, PhD
Peng, Ito - BSW, BSc, MA, PhD
Reitz, Jeffrey G. - PhD
Sociology: Sociology MA

Master of Arts

Program Description

The MA program trains students in the theoretical approaches, research designs, and analytical skills central to the field of Sociology. It provides extensive background and knowledge valuable for a number of rewarding careers in the public and private sectors. The program also builds a strong foundation in sociological training for those who plan to pursue a doctoral degree in Sociology.

Students have the option of completing the master's degree in one of two ways:

- Coursework (the preferred option for those proceeding to the PhD).
- Coursework plus research paper.

Students can take the program on a part-time or full-time basis.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Sociology's additional admission requirements stated below.
- An appropriate bachelor's degree with 5.0 full-course equivalents (FCEs) in sociology, with an overall B+ average in each of the last two years of post-secondary education. Those with excellent grades but whose preparation is insufficient will be required to take additional courses.
- Applicants are also expected to have acquired basic research and statistical skills.
- Admission decisions are based on grades and indications of superior qualifications such as letters of recommendation and a sample of the applicant's work.
- In addition to the School of Graduate Studies' online application form, applicants must submit:
  - Two letters of reference from instructors or research supervisors.
  - A paper, including summary, which the student feels represents his or her best work.
  - A one-page, single-spaced typed statement of interest indicating research interests, research experience, and reasons for applying to study sociology at the University of Toronto.
- Proficiency in the English language, demonstrated by all applicants educated outside Canada whose primary language is not English. See General Regulations section 4.3 English-Language Proficiency for minimum TOEFL (Test of English as a Foreign Language and TWE (Test of Written English) scores required.

Program Requirements

- **Coursework Option**: the preferred option for those proceeding to the PhD
  - 4.0 FCEs or eight half courses including:
    - SOC6001H Classical Sociological Theory I
    - SOC6302H Statistics for Sociologists
    - SOC6712H Qualitative Methods I.
- **Coursework Plus Research Paper Option**
  - 3.0 FCEs or six half courses including:
    - SOC6001H Classical Sociological Theory I
    - SOC6302H Statistics for Sociologists
    - SOC6712H Qualitative Methods I.
  - A research paper.
- Regardless of option, the MA program is completed in 12 months.
- The choice of courses in all programs must be approved by the department.
- A maximum of 0.5 FCE in reading courses may be counted towards the degree requirements.
- A maximum of 0.5 FCE in elective courses taken outside the department may be counted towards the degree requirements unless approval of the Graduate Coordinator is obtained.
- Students must maintain a **B average** to be recommended for the MA degree.

**Program Length**

3 sessions full-time (typical registration sequence: F/W/S); 15 sessions part-time

**Time Limit**

3 years full-time; 6 years part-time

**Sociology: Sociology PhD**

**Doctor of Philosophy**

**Program Description**

The PhD program provides training in conducting theoretically rich and methodologically sophisticated sociological research. Through the program, students design and carry out research projects, present their work at professional conferences, and author scholarly publications. The program is designed to provide both a broad knowledge of the discipline and specialized methodological and subject matter expertise.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate MA or 2) direct entry after completing a bachelor’s degree.

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Sociology's additional admission requirements stated below.
- The normal requirement is completion of the University of Toronto MA, with at least an A- standing. All students must demonstrate that their master's degree program included coursework equivalent to Classical Social Theory, Social Statistics, and Qualitative Methods I. Some students may be required to take prescribed additional courses.
- Admission decisions are based on grades and indications of superior qualifications such as letters of recommendation and a sample of the applicant's work.
- In addition to the School of Graduate Studies' online application form, applicants must submit:
  - Two letters of reference from instructors or research supervisors.
  - A paper, including summary, which the student feels represents his or her best work.
  - A one-page, single-spaced typed statement of interest indicating research interests, research experience, and reasons for applying to study sociology at the University of Toronto.
  - Proficiency in the English language, demonstrated by all applicants educated outside Canada whose primary language is not English. See General Regulations section 4.3 English-Language Proficiency for minimum TOEFL (Test of English as a Foreign Language and TWE (Test of Written English) scores required.

**Program Requirements**

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** including:
  - SOC6101H Contemporary Sociological Theory
  - SOC6707H Intermediate Data Analysis
  - SOC6511H Professional Development Seminar I
  - SOC6611H Professional Development Seminar II
  - SOC6711Y Research Practicum
  - If a student has already taken these courses at the graduate level, other courses will be substituted to obtain the 5.0 FCEs total.
  - A maximum of 0.5 FCE in reading courses may be counted towards the degree requirements.
  - A maximum of 0.5 FCE in elective courses taken outside the department may be counted towards the degree requirements unless approval of the Graduate Coordinator is obtained.
  - An average of **at least B+** is required in order to be eligible to continue in the following year of any program. Failure in any course (that is, less than a B-) will require a review of the student’s total program by the department.
  - Doctoral students must complete SOC6511H and SOC6611H Professional Seminar Series (CR/NCR). These seminars consist of a series of workshops designed to guide students in their graduate school career and beyond. SOC6511H Professional Development Seminar I must be completed in the Fall session of Year 1. SOC6611H Professional Development Seminar II must be completed in the Fall session of Year 3.
  - Two comprehensive examinations, which must be completed by the end of Year 2. If a student fails a comprehensive exam, the student has one attempt to rewrite the exam. The rewrite must occur in the next available exam session.
  - Submission of a written **thesis proposal** and its successful oral defence before a supervisory committee consisting of three faculty members. If a student should fail, the student is permitted one additional opportunity to defend a revised thesis proposal.
  - University policy requires that students complete all their non-thesis requirements (coursework, comprehensive examinations, thesis proposal, and language requirement if applicable) by the end of Year 3.
  - Preparation of an original **PhD thesis**, which must be defended at a Doctoral Final Oral Examination.
  - Candidates must have an adequate knowledge of a language other than English if an additional language is deemed essential for satisfactory completion of research for the thesis.
Two years of **residence**, whereby students must be on campus and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

**Program Length**

4 years

**Time Limit**

6 years

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Sociology’s additional admission requirements stated below.
- The department may recommend admission directly after completion of an appropriate bachelor’s degree. Direct entry of this kind will only be recommended for outstanding students who have provided a clear and detailed plan for thesis research.
- Admission decisions are based on grades and indications of superior qualifications such as letters of recommendation and a sample of the applicant’s work.
- In addition to the School of Graduate Studies’ online application form, applicants must submit:
  - Two letters of reference from instructors or research supervisors.
  - A paper, including summary, which the student feels represents his or her best work.
  - A one-page, single-spaced typed statement of interest indicating research interests, research experience, and reasons for applying to study sociology at the University of Toronto.
  - Proficiency in the English language, demonstrated by all applicants educated outside Canada whose primary language is not English. See General Regulations section 4.3 English-Language Proficiency for minimum TOEFL (Test of English as a Foreign Language and TWE (Test of Written English) scores required.

**Program Requirements**

- **Coursework.** Students must complete 6.5 full-course equivalents (FCEs) including:
  - SOC6001H *Classical Sociological Theory I*
  - SOC6101H *Contemporary Sociological Theory*
  - SOC6302H *Statistics for Sociologists*
  - SOC6511H *Professional Development Seminar I*
  - SOC6611H *Professional Development Seminar II*
  - SOC6707H *Intermediate Data Analysis*
  - SOC6711Y *Research Practicum*
  - SOC6712H *Qualitative Methods I.*
  - A maximum of 0.5 FCE in reading courses and 0.5 FCE in elective courses taken outside the department may be counted towards the degree requirements.
- An average of at least B+ is required in order to be eligible to continue in the following year of any program. Failure in any course (that is, less than a B-) will require a review of the student’s total program by the department.
- Doctoral students must complete SOC6511H and SOC6611H *Professional Seminar Series (CR/NCR).* These seminars consist of a series of workshops designed to guide students in their graduate school career and beyond. SOC6511H *Professional Development Seminar I* must be completed in the Fall session of Year 1. SOC6611H *Professional Development Seminar II* must be completed in the Fall session of Year 3.
- Two comprehensive examinations, which must be completed by the end of Year 2. If a student fails a comprehensive exam, the student has one attempt to rewrite the exam. The rewrite must occur in the next available exam session.
- Submission of a written *thesis proposal* and its successful oral defence before a supervisory committee consisting of three faculty members. If a student should fail, the student is permitted one additional opportunity to defend a revised thesis proposal.
- University policy requires that students complete all their non-thesis requirements (coursework, comprehensive examinations, thesis proposal, and language requirement if applicable) by the end of Year 3.
- Preparation of an original *PhD thesis*, which must be defended at a Doctoral Final Oral Examination.
- Candidates must have an adequate knowledge of a language other than English if an additional language is deemed essential for satisfactory completion of research for the thesis.
- Two years of **residence**, whereby students must be on campus and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

**Program Length**

5 years

**Time Limit**

7 years

**Sociology: Sociology MA, PhD Courses**

For details on course offerings, check with the departmental graduate office.

**Theory and Methods of Sociology — Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC6001H</td>
<td>Sociological Theory I</td>
</tr>
<tr>
<td>SOC6101H</td>
<td>Sociological Theory II</td>
</tr>
<tr>
<td>SOC6201H</td>
<td>Sociological Theory III</td>
</tr>
</tbody>
</table>
### Sociology

- SOC6301H  Sociological Theory IV
- SOC6302H  Statistics for Sociologists
- SOC6303H  Ethnography
- SOC6309H  Indigeneity I
- SOC6401H  Special Topics in Sociological Theory
- SOC6502H  The Sociology Curriculum
- SOC6707H  Intermediate Data Analysis
- SOC6708H  Advanced Data Analysis
- SOC6710H  The Logic of Social Inquiry
- SOC6711Y*  Research Practicum
- SOC6712H  Qualitative Methods I
- SOC6713H  Qualitative Methods II
- SOC6715H  Historical Sociology

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

### Areas of Specialization

#### Gender and Family

- SOC6017H  Sociology of Families I
- SOC6019H  Gender Relations I
- SOC6119H  Gender Relations II
- SOC6219H  Gender Relations III

#### Health and Mental Health

- SOC6022H  Sociology of Health
- SOC6023H  Sociology of Mental Health I
- SOC6024H  Special Topics in Health
- SOC6122H  Sociology of Mental Health II
- SOC6126H  The Social Ecology of Health

#### Immigration, Ethnicity, and Race

- SOC6002H  Immigration I
- SOC6003H  Immigration II
- SOC6009H  Ethnicity I
- SOC6109H  Ethnicity II

#### Networks and Community

- SOC6008H  Network Analysis I
- SOC6108H  Network Analysis II
- SOC6214H  Sociology of Urbanization
- SOC6314H  Community
- SOC6414H  Urban Organization

#### Political Sociology

- SOC6010H  Political Sociology I
- SOC6110H  Political Sociology II
- SOC6210H  Political Sociology III
- SOC6014H  Environmental Sociology I
- SOC6125H  Theories of Social Change

#### Sociology of Crime and Law

- CRI3140H  Special Topics in Criminology and Sociolegal Studies
- SOC6006H  Sociology of Crime and Law I: Criminology
- SOC6106H  Sociology of Crime and Law II: Sociology of Law
- SOC6206H  Sociology of Crime and Law III: Punishment
- SOC6306H  Advanced Topics in Sociology of Crime and Law I
- SOC6406H  Advanced Topics in Sociology of Crime and Law II
- SOC6506H  Advanced Topics in Sociology of Crime and Law III

#### Sociology of Culture

- SOC6516H  Sociology of Culture
- SOC6517H  Culture and Cognition
- SOC6518H  Culture Industries
- SOC6520H  Special Topics in Sociology of Culture

#### Work, Stratification, and Markets

- SOC6012H  Work, Stratification, and Markets I
- SOC6013H  Social Inequality I
### Other Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC6212H</td>
<td>Work, Stratification, and Markets III</td>
</tr>
<tr>
<td>SOC6312H</td>
<td>Work, Stratification, and Markets IV</td>
</tr>
</tbody>
</table>

### Sociology and the Policy Process in Canada

- SOC6021Y

### Professional Development Seminars

- SOC6511H Professional Development Seminar I (Credit/No Credit)
- SOC6611H Professional Development Seminar II (Credit/No Credit)
- SOC6811H Seminar in Teaching

### Special Reading Courses

- SOC6015H A reading course or individual research in an approved field I
- SOC6115H A reading course or individual research in an approved field II

### MA Research Paper

- SOC6215Y MA Research Paper
Spanish

Spanish: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Spanish

MA and PhD

- Fields:
  - Hispanic Linguistics;
  - Hispanic Literatures and Cultures

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Book History and Print Culture
  - Spanish, MA, PhD
- Diaspora and Transnational Studies
  - Spanish, MA, PhD
- Women and Gender Studies
  - Spanish, MA, PhD

Overview

The Department of Spanish offers graduate programs leading to two degrees: Master of Arts and Doctor of Philosophy. MA and PhD students specialize in one of two fields:

- Hispanic Linguistics
- Hispanic Literatures and Cultures.

Applicants are admitted under the General Regulations of the School of Graduate Studies and must also satisfy the department's requirements stated below. In all cases, programs must be approved by the department.

The application process for the Master of Arts program is competitive; meeting the minimum standards for admission does not guarantee acceptance.

The admissions process for the Doctor of Philosophy program is competitive; it is based on a number of factors in addition to grades. The principal factors include the ability of the department to offer graduate work in the applicant's preferred areas of interest, the availability of appropriate supervisory resources, and the suitability of the applicant in relation to the academic profile and programs of the department. The department does not allow direct entry to the PhD program with a BA, nor does it allow MA students to transfer to the PhD program before the coursework for the MA is completed.

Contact and Address

Web: www.spanport.utoronto.ca
Email: spanport@chass.utoronto.ca or spanish.graduate@utoronto.ca

Telephone: (416) 813-4080 or (416) 813-4082
Fax: (416) 813-4084

Department of Spanish
University of Toronto
Victoria College
Room 208, 91 Charles Street West
Toronto, Ontario M5S 1K7
Canada

Spanish: Graduate Faculty

Full Members

Antebi, Susan - AM, PhD (Graduate Coordinator)
Colantoni, Laura - MA, PhD
Cuervo, M. Cristina - PhD
Davidson, Bob - BA, AM, PhD
Iglesias, Yolanda - BA, BA, MA, PhD
Jagoe, Eva-Elynn - BA, MA, PhD
Munjic, Sanda - BA, AM, PhD
Perez-Leroux, Ana Teresa - MA, PhD (Chair and Graduate Chair)
Rodriguez, Nestor - BA, PhD
Rupp, Stephen - BA, MA, MPH, MA, PhD
Sarabia, Rosa - BA, PhD

Members Emeriti

Burke, James - BA, MA, PhD
Ellis, Keith A.A. - BA, PhD
Glickman, Robert - AB, AM, PhD
Gulsoy, Joseph - BA, BA, MA, PhD
Leon, Pedro - BA, MA, PhD
Neglia, Erminio - BA, DA, MA, PhD
Percival, Anthony - BA, MA, PhD
Skyrme, Raymond - BA, MA, PhD
Webster, Jill - BA, MA, PhD

Associate Members

Alvarez, Natalie - BA, MA, PhD
Alves dos Santos Rato, Anabela - PhD
Ramirez-Salazar, Manuel - BA, MA, PhD
Rivas, Victor - BA, AM, PhD
Steele, Jeffrey - BA, MA, PhD
Zavala, Oswaldo - LHD, LHD
Spanish: Spanish MA

Master of Arts

Program Description

The application process for the Master of Arts program is competitive; meeting the minimum standards for admission does not guarantee acceptance.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Spanish’s additional admission requirements stated below.
- An appropriate bachelor’s degree in Spanish or a cognate discipline from a recognized university.
- Fluency in spoken and written Spanish with a general background in Hispanic literature and/or linguistics, normally demonstrated through undergraduate coursework.
- Applicants apply online and should arrange for electronic submission of the following materials:
  - A one-page statement of purpose, outlining the applicant's areas of interest (in English).
  - A sample of written work in Spanish (10 to 12 pages).
  - Two letters of recommendation, ideally in English (one of the letters must comment on the applicant's fluency in Spanish).
  - A curriculum vitae in English.

Program Requirements

- 4.0 full-course equivalents (FCEs) at the graduate level.
- MA students specialize in one of two fields:
  - Hispanic Linguistics.
  - Hispanic Literatures and Cultures.
- The specialization requires that each student complete coursework in accordance with distribution requirements for each field, defined in terms of the various areas of the graduate curriculum.
- Courses are selected in consultation with the Graduate Coordinator. With departmental approval, courses may be taken in a cognate unit (e.g., Comparative Literature, French, History, Linguistics, Medieval Studies, Women's Studies).
- It is the department's expectation that full-time students will complete all program requirements in one academic year. The MA program is also available on a part-time basis. Applicants should be aware that part-time students are not eligible for funding.
- Students in the field of Hispanic Linguistics must have completed an introductory course in linguistics (LIN100Y or an equivalent course). Students who have not completed LIN100Y as part of their undergraduate studies must take this course in the summer directly preceding their admission to the MA program.

Program Length

2 sessions full-time (typical registration sequence: F/W); 6 sessions part-time

Spanish: Spanish PhD

Doctor of Philosophy

Program Description

The admissions process for the Doctor of Philosophy program is competitive; it is based on a number of factors in addition to grades. The principal factors include the ability of the department to offer graduate work in the applicant's preferred areas of interest, the availability of appropriate supervisory resources, and the suitability of the applicant in relation to the academic profile and programs of the department.

The department does not allow direct entry to the PhD program with a BA degree. Students in the MA program in Spanish who would like to continue to the PhD must apply through the regular application process; there is no process for direct transfer from MA to PhD.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Spanish’s additional admission requirements stated below.
- Master's degree from a recognized university in an appropriate discipline with an average of A– or higher.
- Applicants apply online and should arrange for electronic submission of the following material:
  - A one-page statement of purpose, outlining the applicant's areas of interest (in English).
  - A sample of written work in Spanish (10 to 12 pages).
  - Two letters of recommendation, ideally in English (one of the letters must comment on the applicant's fluency in Spanish).
  - A curriculum vitae in English.

Program Requirements

- PhD students specialize in one of two fields:
  - Hispanic Linguistics.
  - Hispanic Literatures and Cultures.
- Coursework. Students must successfully complete a total of 4.0 full-course equivalents (FCEs). Course selection is proposed to the Graduate Coordinator, who reviews and approves the plan. It is expected that students will complete the required coursework in Year 1. However, with the approval of the Graduate Coordinator, up to 1.0 FCE may be taken in Year 2. Each field has distribution requirements. Students must maintain a minimum average of A– in order to remain in good academic standing.
- By March 25 of Year 1, each student must seek approval from the Graduate Advisory Committee for the proposed area of his/her dissertation and the membership of the
Field Examination Committee (normally the proposed dissertation supervisor and two other members of the graduate faculty). The Graduate Advisory Committee will respond in writing by May 1 of the same year. The final decision in this matter rests with the Graduate Advisory Committee. In consultation with their committee, students must start their preparation for their field exams in the Summer session of Year 1.

- **The field examination** centres on two subfields: the subfield of the student's proposed dissertation research and a subfield relevant to the student's research and general preparation.

- By October 1 of Year 2, each student must submit to the Graduate Coordinator a brief statement (three to four pages double spaced) concerning the primary and secondary subfields for their field examination and two reading lists (one for each subfield). Each reading list should consist of 25 to 30 items and should include primary and secondary sources. The student's Field Committee will review this material and meet with the student to indicate revisions or additions to the reading lists. The student must file final copies of the two reading lists and statements, as approved by the committee, with the Graduate Coordinator by November 1.

- The field examination will take place between January 15 and February 15 of Year 2. It has two parts: a written examination of six hours and an oral examination of two hours. Each part will cover the primary and secondary subfields that the student has prepared.
  - The written examination will consist of three questions. At least one of the questions must be answered in Spanish, and at least one of the questions must be answered in English.
  - The oral examination will follow two weeks after the written exam; it will normally be conducted in Spanish, although English may be used to accommodate committee members from cognate units. The Field Committee will grade the two parts of the examination together, on a credit/non-credit basis. A student who does not receive credit on the first attempt must retake both parts of the examination by May 10.

- Each student must submit a written dissertation proposal to the Graduate Coordinator by April 25 of Year 2 of enrolment in the program. The written proposal articulates the topic, the research questions and methodology of the student's proposed research, and presents a sample of analysis, in approximately 25 pages double spaced. In addition, the proposal should include a bibliography, an outline of the dissertation, and a plan of action which associates the outline with activities of research and writing within a timeline for the three sessions per year. The proposal should be written in the language that the student intends to use in writing the dissertation (Spanish or English).
  - Each student must defend their dissertation proposal (including the outline and plan of action) in a two-hour, public oral examination to be held by May 15, normally conducted in the language of the student's proposal.
  - The student's Field Committee will grade the written proposal and the oral examination on a credit/non-credit basis. A student who does not receive credit on the first attempt must revise and resubmit the dissertation proposal by September 15 of Year 3 of enrolment and retake the oral examination on the proposal by October 15 of that year.

- **Language requirements** must be fulfilled before registering for Year 4. Each student must demonstrate a reading knowledge of French and of a third non-English language relevant to their area of research. These language requirements may be satisfied by passing the appropriate reading knowledge courses or examinations offered by the corresponding departments of the Faculty of Arts and Science at the University of Toronto (including the exams offered in-house by the Department of Spanish and Portuguese).
  - Significant prior training in a language (such as an undergraduate major or minor) will also be accepted as demonstration of reading knowledge.
  - Native speakers of languages other than English and Spanish, who have received their formal education in that language (minimum of a high school diploma) may request an exemption for the third-language requirement.

- Years 3 and 4 are devoted to researching and writing the [doctoral dissertation](#). The Supervisory Committee must normally approve the complete draft of the dissertation before the candidate can proceed to the Doctoral Final Oral Examination.

- Students fulfil the [residence requirement](#) by being registered as full-time on-campus and must reside in sufficient geographical proximity to enable them to fulfil the requirements of the program in a timely fashion. They are also expected to participate fully in departmental activities. While writing the dissertation, candidates are expected to be in residence, with the exception of absences for research purposes and approved leaves.

### Program Length

- 4 years full-time

### Time Limit

- 6 years full-time

### Spanish: Spanish MA, PhD Courses

Most graduate courses are offered in a regular rotation. As a result, only a subset of the courses that appear in this calendar entry will be available in a given academic session. A [list of offered courses](#) is posted on the department's website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SPA1053H</td>
<td>History of the Spanish Language</td>
</tr>
<tr>
<td>SPA1080H</td>
<td>Descriptive Grammar of Spanish</td>
</tr>
<tr>
<td>SPA1082H</td>
<td>Sociolinguistics of Spanish</td>
</tr>
<tr>
<td>SPA1083H</td>
<td>Microvariation in Spanish</td>
</tr>
<tr>
<td>SPA1084H</td>
<td>Experimental Approaches to Hispanic Linguistics</td>
</tr>
<tr>
<td>SPA1088H</td>
<td>Spanish Syntax</td>
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<tr>
<td>SPA1089H</td>
<td>Spanish Morphosyntax</td>
</tr>
<tr>
<td>SPA1090H</td>
<td>Second Language Speech Learning</td>
</tr>
<tr>
<td>SPA1091H</td>
<td>Second Language Acquisition of Portuguese and Spanish</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>-------------</td>
<td>------------------------------------------------------------------</td>
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<tr>
<td>SPA1092H</td>
<td>Portuguese and Spanish Semantics</td>
</tr>
<tr>
<td>SPA1093H</td>
<td>Linguistics in Spanish</td>
</tr>
<tr>
<td>SPA1094H</td>
<td>Spanish Bilingualism</td>
</tr>
<tr>
<td>SPA1097H</td>
<td>Second-Language Teaching and Methodology</td>
</tr>
<tr>
<td>SPA1101H</td>
<td>Topics in the Acquisition of Spanish</td>
</tr>
<tr>
<td>SPA1104H</td>
<td>Experimental Approaches to Sound Variation and Change</td>
</tr>
<tr>
<td>SPA1105H</td>
<td>Spanish Intonation</td>
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<tr>
<td>SPA1104H</td>
<td>Directed Research in Hispanic Linguistics</td>
</tr>
<tr>
<td>SPA2016H</td>
<td>Medieval Spanish Narrative</td>
</tr>
<tr>
<td>SPA2018H</td>
<td>Poetics of Early Drama</td>
</tr>
<tr>
<td>SPA2052H</td>
<td>Graphic Legacy of Celestina: Visual Culture and Social Studies</td>
</tr>
<tr>
<td>SPA2060H</td>
<td>Literature and Society of Castile in the Late Middle Ages and Early Renaissance</td>
</tr>
<tr>
<td>SPA2121H</td>
<td>Psychoanalysis and the Passions in Early Modern Literature</td>
</tr>
<tr>
<td>SPA2150H</td>
<td>Defining Journeys in the Spanish Empire</td>
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<tr>
<td>SPA2152H</td>
<td>Cervantes’ Don Quixote</td>
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<td>SPA2160H</td>
<td>Transatlantic Hispanic Baroque</td>
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<tr>
<td>SPA2284H</td>
<td>Narrative and Political Transition in Spain</td>
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<tr>
<td>SPA2291H</td>
<td>The Urban Experience in Spain</td>
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<tr>
<td>SPA2292H</td>
<td>New Ruralism and Spain</td>
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<td>SPA2304H</td>
<td>Latin American Cinema</td>
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<tr>
<td>SPA2305H</td>
<td>Auteurism in Spanish Cinema</td>
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<tr>
<td>SPA2352H</td>
<td>Modern Spanish Drama and its Traditions</td>
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<td>SPA2404H</td>
<td>The Latin American Novel</td>
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<td>SPA2406H</td>
<td>Latin American Narratives of Resistance</td>
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<td>SPA2411H</td>
<td>Latin American Icons and the Sensory Work of Objects</td>
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<td>SPA2412H</td>
<td>Disease Stories: Race, and Fears of Contagion in Latin America</td>
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<td>SPA2415H</td>
<td>Disability and Latin American Cultural Production</td>
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<td>SPA2424H</td>
<td>Spanish American Poetry and Poetics</td>
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<td>SPA2425H</td>
<td>21st Century Latin American Art and Culture</td>
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<td>SPA2432H</td>
<td>Text and Image in Latin American Culture</td>
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<tr>
<td>SPA2802H</td>
<td>The Politics of Errantry in the Hispanic Caribbean</td>
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<tr>
<td>SPA2805H</td>
<td>Representations of Women in Latin American Culture</td>
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<tr>
<td>SPA2900H</td>
<td>Issues in Literary Theory and Hispanic Texts</td>
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<tr>
<td>SPA2905H</td>
<td>Latin American Cultural Theories</td>
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<tr>
<td>SPA2940H</td>
<td>Pursuing the Post-Revolution: Literature and Philosophy of Mexicanidad</td>
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<tr>
<td>SPA2947H</td>
<td>Transparency and Politics in Contemporary Mexican Literature</td>
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<tr>
<td>SPA3000H</td>
<td>Directed Research in Hispanic Literatures</td>
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<tr>
<td>SPA3300H</td>
<td>Hispanic Literature and Linguistics Research Forum (Credit/No Credit)</td>
</tr>
<tr>
<td>JOS5019H</td>
<td>Cervantes and Renaissance Humanism</td>
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<tr>
<td>JOS5029H</td>
<td>Reading Cervantes</td>
</tr>
<tr>
<td>JRL1101H</td>
<td>Topics in Romance Laboratory Phonetics and Phonology I: Theory</td>
</tr>
</tbody>
</table>
Speech-Language Pathology

Overview

The Department of Speech-Language Pathology was established at the University of Toronto in 1958 with the creation of a two-year postgraduate diploma program, the first English-speaking program in Canada. The Master of Health Science (MHSc) program was established in 1978 and is a full-time professional graduate program. Academic and clinical faculty provide innovative teaching and learning opportunities for students in a unique integrated curriculum.

Contact and Address

Web: slp.utoronto.ca
Email: slp.studentaffairs@utoronto.ca
Telephone: (416) 978-1794

Department of Speech-Language Pathology
Faculty of Medicine
University of Toronto
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#160-500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Speech-Language Pathology: Graduate Faculty

Full Members

Beal, Deryk - BA, MHSc, PhD
Bressman, Tim - MPH, PhD
De Nil, Luc - MSc, PhD
Girolametto, Luigi - BA, MSc, PhD
Helms-Park, Rena - BA, MA, AM, DPhil
Johnson, Carla - PhD
Martino, Rosemary - BS, MA, PhD
Ng, Stella - BA, MA, PhD
Rochon, Elizabeth - BA, MSc, PhD
Smyth, Ronald - BA, MSc, PhD
Square, Paula Ann - BSc, MA, PhD
Steele, Catriona - BA, MHSc, PhD
van Lieshout, Pascal - MA, MA, PhD (Chair and Graduate Chair)
Yunusova, Yana - MS, MA, PhD

Associate Members

Ben-David, Boaz - BA, MA, PhD
Bradley, Kimberley - BA, MHSc, PhD
Ellwood, Lynn - BSc(UD), MA
Jacobson, Marlene - BA, PhD
Jokel, Regina - MHSc, PhD
Kagan, Aura - BAA, BA, MA, PhD
Leonard, Carol - BA, MAsc, PhD
Liu, Louis - MD, PhD
Parnes, Penny - BSc
Wagner, Susan - BSc, MSc
Weitzman, Elaine - BA, MEd

Speech-Language Pathology: Speech-Language Pathology MHSc

Master of Health Science

Program Description

The MHSc program educates highly competent graduate-level clinicians in the profession of speech-language pathology. It prepares students to work in a variety of settings, such as hospitals, schools, and community clinics. Speech-language pathologists provide service across the lifespan to individuals with a wide range of speech, language, hearing, and swallowing disorders. The integrated curriculum places equal emphasis on theoretical and practical competencies regarding normal development, as well as on the assessment and treatment of disorders in human communication and swallowing.

The MHSc program extends over 22.5 months and comprises five academic and four clinical units with a capstone portfolio in a unique and internationally acclaimed curriculum. The themed academic units are directly followed by full-time clinical placements targeting the same areas of practice, enabling a strong research-to-practice focus.

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants must also satisfy the Department of Speech-Language Pathology's additional admission requirements stated below and outlined in the Ontario Rehabilitation Sciences Application Service (ORPAS) Application Guide.
- Applicants must obtain an appropriate bachelor's degree from a recognized university, with a standing equivalent to at least a University of Toronto mid-B in the final year.
- Applicants must complete prerequisite undergraduate university-level courses with grades of at least a B+ in child development (one half course), general linguistics (one half course), phonetics (one half course), elementary statistics (one half course), research methods (one half course), and human physiology (one full course).
Applicants must arrange to have two academic referees complete the Confidential Assessment Form and write an academic reference letter.

- Applicants must complete a minimum of 14 hours of clinical experience supervised by a registered speech-language pathologist.
- Applicants must arrange for a Clinical Reference Form and accompanying letter from the primary supervisor of the clinical experience.
- Applicants must complete a Statement of Intent that has two components: 1) the reasons for choosing speech-language pathology as a career; specific personal attributes that would be relevant to the profession; academic and non-academic accomplishments and reasons for choosing the MHSc program in Speech-Language Pathology at the University of Toronto; and 2) a summary of volunteer experiences.
- Proficiency in oral and written English is required for both the academic and applied aspects of the program. Applicants who were educated outside Canada, whose primary language is not English and who graduated from a university where the language of instruction was not English, must demonstrate proficiency in the English language through the successful completion of one of the English proficiency tests. To satisfy the requirement, the department strongly prefers the Test of English as a Foreign Language (TOEFL) with the following minimum scores:
  - Internet-based TOEFL: 100/120 with 22/30 on the speaking section and 22/30 on the writing section.
- If an applicant finds it impossible to take the TOEFL, Test of Written English (TWE), and Test of Spoken English (TSE), the department will accept the International English Language Testing System (IELTS) with a minimum score of 8.0.
- Applicants may be requested to attend a personal meeting with members of the Department of Speech-Language Pathology to provide an opportunity to clarify documentation and explore in-depth issues, such as spoken and written language ability and areas of academic performance or interpersonal communication skills.
- See the departmental website and the ORPAS Application Guide for details on application instructions.

Program Requirements

- The professional MHSc program is divided into five academic and four clinical units. Each academic unit is composed of related coursework. Teaching within and across units emphasizes integrated learning experiences. Academic units are followed by full-time clinical placements, four overall for a total of 30 weeks of clinical experience throughout the two-year program. Students should anticipate receiving at least one placement outside the Greater Toronto Area. Students must accept placements offered to them and are responsible for all travel and accommodation costs.
- Prior to graduation, all MHSc students are required to complete a capstone portfolio that demonstrates their proficiency in key areas of professional practice.
- Students must complete all requirements within two consecutive years.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Speech-Language Pathology: Speech-Language Pathology MHSc Courses

Consult the department for courses offered during each academic year.

Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SLP1500Y</td>
<td>Internship (Credit/No Credit)</td>
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<tr>
<td>SLP1502Y</td>
<td>Anatomy and Embryology</td>
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<tr>
<td>SLP1503Y</td>
<td>Articulation and Related Disorders</td>
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<tr>
<td>SLP1505Y</td>
<td>Child Language I</td>
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<td>SLP1506H</td>
<td>Child Language II</td>
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<td>SLP1507H</td>
<td>Clinical Laboratory in Speech-Language Pathology</td>
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<tr>
<td>SLP1514Y</td>
<td>Applied Audiology</td>
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<tr>
<td>SLP1516H</td>
<td>Aural Rehabilitation</td>
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<td>SLP1520H</td>
<td>Principles of Clinical Practice</td>
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<td>SLP1521H</td>
<td>Augmentative Communication</td>
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<td>SLP1522Y</td>
<td>Speech Physiology and Acoustics</td>
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<td>SLP1529H</td>
<td>Fluency Disorders</td>
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<td>SLP1530H</td>
<td>Voice Disorders</td>
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<td>SLP1532H</td>
<td>Clinical Laboratory in Hearing Disorders (Credit/No Credit)</td>
</tr>
<tr>
<td>SLP1539H</td>
<td>Capstone Portfolio</td>
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</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

0 Course that may continue over a program. Credit is given when the course is completed, or the course is graded when completed.

Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>SLP1508Y</td>
<td>Advanced Clinical Laboratory in Speech-Language Pathology</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>SLP1525H</td>
<td>Structurally Related Disorders</td>
</tr>
<tr>
<td>SLP1527H*</td>
<td>Clinical Analysis of Communication and Swallowing Disorders</td>
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<tr>
<td>SLP1528H*</td>
<td>Research in Speech-Language Pathology</td>
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<tr>
<td>SLP1533Y</td>
<td>Aphasia</td>
</tr>
<tr>
<td>SLP1534H</td>
<td>Motor Speech Disorders</td>
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<tr>
<td>SLP1535H*</td>
<td>Advanced Principles of Clinical Practice</td>
</tr>
<tr>
<td>SLP1536H</td>
<td>Swallowing Disorders</td>
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<tr>
<td>SLP1538H</td>
<td>Neurocognitive Communication Disorders</td>
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<tr>
<td>SLP2500Y</td>
<td>Advanced Internship</td>
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</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Statistical Sciences

Statistical Sciences: Introduction

Faculty Affiliation
Arts and Science

Degree Programs
Financial Insurance
MFI
Statistics
MSc

• Fields:
  o Statistical Theory and Applications;
  o Probability

PhD

• Fields:
  o Statistical Theory and Applications;
  o Probability;
  o Actuarial Science and Mathematical Finance

Overview

Statistical Sciences involves the study of random phenomena and encompasses a broad range of scientific, industrial, and social processes. As data become ubiquitous and easier to acquire, particularly on a massive scale, and computational tools become more efficient, models for data are becoming increasingly complex. The past several decades have witnessed a vast impact of statistical methods on virtually every branch of knowledge and empirical investigation.

Please visit the departmental website for details about the fields offered, the research being conducted, and the courses. The department offers substantial computing facilities and operates a statistical consulting service for the University’s research community. Programs of study may involve association with other departments such as Computer Science, Economics, Engineering, Mathematics, Public Health Sciences, and the Rotman School of Management. The department maintains an active seminar series and strongly encourages graduate student participation.

Students may be interested in the Data Science concentration within the Master of Science in Applied Computing program.

Contact and Address

MFI Program
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MSc and PhD Programs
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Fax: (416) 978-5133

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Ontario Power Building, 700 University Avenue, 9th Floor
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Statistical Sciences: Graduate Faculty

Full Members

Alexander, Monica - MA, PhD
Alexander, Rohan Peter - MSc, PhD
Badescu, Andrei - BSc, MSc, DPhil
Brenner, David - BSc, MSc, PhD
Broverman, Samuel - BSc, MSc, PhD
Brown, Patrick - BA, MSc, PhD
Brunner, Jerry - BA, MA, PhD, DPhil
Craiu, Radu - BSc, MSc, PhD
Duvenaud, David - PhD
Eadie, Gwendolyn - BS, MSc, PhD
Escobar, Michael - BS, PhD
Evans, Michael - BSc, MSc, PhD
Feuerverger, Andrey - BSc, PhD
Goldenberg, Anna - PhD
Gronsbell, Jessica - BA, PhD
Grosse, Roger - PhD
Jaimungal, Sebastian - BSc, MSc, PhD
Knight, Keith - BSc, MS, PhD
Kong, Dehan - BS, MS, PhD
Leos Barajas, Vianey - BSc, MS
Lin, Xiaodong - BSc, MSc, MMath, PhD
Lou, Wendy - DPhil
McDunnough, Philip - BSc, MSc, PhD
Park, Jun Young - PhD
Pesenti, Silvana - BSc, MSc, PhD
Quastel, Jeremy - BSc, MS, PhD
Reid, Nancy - BM, MSc, PhD, FRSC
Rosenthal, Jeffrey - BSc, AM, PhD, FRSC
Seco, Luis - PhD
Stafford, James - BS, MS, PhD
Strug, Lisa - BS, BA, SM, PhD
Sun, Lei - BS, PhD (Associate Chair, Graduate Studies)
Urtasun, Raquel - PhD
Virag, Balint - BA, MA, PhD
Volgushev, Stanislav - MA, PhD
Williams, Joseph - PhD
Wong, Ting-Kam Leonard - BSc, MPH, PhD
Zhou, Zhou - MSc, DPhil

Members Emeriti
Andrews, David - BSc, MSc, PhD
Guttman, Irwin - BSc, MA, PhD
Srivastava, Muni - MSc, PhD

Associate Members
Bolton, Liza - BSc
Caetano, Samantha-Jo - BSc, MSc, PhD
Campbell, Kieran - PhD
Chevalier, Fanny - PhD
Erdogdu, Murat Anil - PhD
Gibbs, Alison - BSc, MSc, PhD
Moon, Nathalie - BSc, MMath, PhD
Shams, Shahriar - MA
Sue-Chee, Shivon - PhD
Taback, Nathan - BSc, MSc, PhD
White, Bethany - BSc, MMath, PhD
Willmot, Gordon - BMath, MMath, PhD
Zhang, Vicki - BScEE, MSc

Statistical Sciences: Financial Insurance
MFI

Master of Financial Insurance

Program Description
The MFI is a full-time professional program based on three pillars: data science, financial mathematics, and insurance modelling. This program is appropriate for students with backgrounds in statistics, actuarial science, economics, and mathematics. Students with a quantitative background (such as physics and engineering) and sufficient statistical training are also encouraged to apply.

Minimum Admission Requirements
- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Statistical Sciences’ additional admission requirements stated below.
- An appropriate bachelor’s degree from a recognized university in a related field such as statistics, mathematics, finance, and actuarial science, or any discipline where there is a significant quantitative component. Studies must include significant exposure to statistics, mathematics, finance, and actuarial science, including coursework in advanced calculus, computational methods, linear algebra, probability, and statistics.
- An average grade equivalent to at least a University of Toronto B+ in the final year or over senior courses; applicants who meet the SGS grade minimum of mid-B and demonstrate exceptional ability through appropriate workplace experience will be considered.
- Three letters of reference including two academic references, one of which should be in a quantitative discipline.
- A curriculum vitae detailing the student’s educational background, professional experience, and skills.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English using one of the official methods outlined in the SGS Calendar.
- Selected applicants may be required to attend an interview.

Admission to the program is competitive, and achievement of the minimum admission standards does not guarantee admission into the program.

Program Requirements
- Students must successfully complete 5.5 full-course equivalents (FCEs) as follows:
  - Eight and a half required half courses (4.0 FCEs).
  - STA2546H Data Analytics in Practice (0.25 FCE).
  - STA2560Y Industrial Internship, a four-month summer internship (1.0 FCE). Students must submit a project proposal to the program director and select an advisor by April 15. Students will propose a placement site to be approved by the department. The department will provide approval of the proposal by May 15. An interim report is required by July 7. Students must prepare a final written report and deliver an oral presentation on the internship project at the conclusion of the internship.

Required Courses

Fall Session

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>STA2503H</td>
<td>Applied Probability for Mathematical Finance</td>
</tr>
<tr>
<td>STA2530H</td>
<td>Applied Time-Series Analysis</td>
</tr>
<tr>
<td>STA2535H</td>
<td>Life Insurance Mathematics</td>
</tr>
<tr>
<td>STA2536H</td>
<td>Data Science for Risk Modelling</td>
</tr>
<tr>
<td>STA2550H*</td>
<td>Industrial Seminar Series</td>
</tr>
</tbody>
</table>

Winter Session

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA2540H</td>
<td>Insurance Risk Management</td>
</tr>
</tbody>
</table>
STA2546H  Data Analytics in Practice
STA2550H*  Industrial Seminar Series
STA2551H  Finance and Insurance Case Studies
STA2570H  Numerical Methods for Finance and Insurance
STA 45##  [To be selected by the student with approval of the Director.]

Summer Session

STA2560Y  Industrial Internship

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Program Length

3 sessions full-time (typical registration sequence: F/W/S)

Time Limit

3 years full-time

Statistical Sciences: Statistics MSc

Master of Science

Program Description

Students in the MSc program can conduct research in the fields of 1) Statistical Theory and Applications or 2) Probability. The program offers numerous courses in theoretical and applied aspects of Statistical Sciences, which prepare students for pursuing a PhD program or directly entering the data science workforce.

The MSc program can be taken on a full-time or part-time basis. Program requirements are the same for the full-time and part-time options.

Fields:
1) Statistical Theory and Applications;
2) Probability

Minimum Admission Requirements

- Admission to the MSc program is competitive, and applicants are admitted under the General Regulations of the School of Graduate Studies. Admission requirements for the Statistical Theory and Applications field and the Probability field are identical. Successful applicants have:
  - An appropriate bachelor’s degree from a recognized university in a related field such as statistics, actuarial science, mathematics, economics, engineering, or any discipline where there is a significant quantitative component. Studies must include significant exposure to statistics, computer science, and mathematics, including coursework in advanced calculus, computational methods, linear algebra, probability, and statistics.
  - An average grade equivalent to at least a University of Toronto mid-B in the final year or over senior courses.
  - Three letters of reference.
  - A curriculum vitae.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

- Both the Statistical Theory and Applications field and the Probability field have the same program requirements. All programs must be approved by the Associate Chair for Graduate Studies.
- Students must complete a total of 4.0 full-course equivalents (FCEs), of which 2.0 must be chosen from the list below:
  - STA2101H  Methods of Applied Statistics I
  - STA2201H  Methods of Applied Statistics II
  - STA2111H  Probability Theory I
  - STA2121H  Probability Theory II
  - STA2122H  Mathematical Statistics I
  - STA2222H  Mathematical Statistics II
- The remaining 2.0 FCEs may be selected from:
  - Any Department of Statistical Sciences 2000-level course or higher.
  - Any 1000-level course or higher in another graduate unit at the University of Toronto with sufficient statistical, computational, probabilistic, or mathematical content.
  - One 0.5 FCE as a reading course.
  - One 0.5 FCE as a research project.
  - A maximum of 1.0 FCE from any STA 4500-level modular course (each are 0.25 FCE).
- All programs must be approved by the Associate Chair for Graduate Studies. Students must meet with the Associate Chair to ensure that their program meets the requirements and is of sufficient depth.
- Part-time students are limited to taking 1.0 FCE during each session. In exceptional cases, the Associate Chair for Graduate Studies may approve 1.5 FCEs in a given session.

Program Length

3 sessions full-time (typical registration sequence: F/W/S);
6 sessions part-time

Time Limit

3 years full-time; 6 years part-time
Statistical Sciences: Statistics PhD

Doctor of Philosophy

Program Description

Students in the PhD program can conduct research in the fields of 1) Statistical Theory and Applications or 2) Probability or 3) Actuarial Science and Mathematical Finance. The research conducted in the department is vast and covers a diverse set of areas in theoretical and applied aspects of Statistical Sciences. Students have the opportunity to work in multidisciplinary areas and team up with researchers in, for example, Biostatistics, Computer Science, Economics, Engineering, and the Rotman School of Management. The main purpose of the program is to prepare students for pursuing advanced research both in academia and in research institutes.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate master’s degree or 2) direct entry after completing an appropriate bachelor’s degree (excluding Actuarial Science and Mathematical Finance).

Fields:
1) Statistical Theory and Applications;
2) Probability

PhD Program

Minimum Admission Requirements

- Admission to the PhD program is competitive, and applicants are admitted under the General Regulations of the School of Graduate Studies.
- Applicants may be accepted with a master’s degree in statistics from a recognized university with at least a B+ average. Applicants with degrees in biostatistics, computer science, economics, engineering, mathematics, physics, or any discipline where there is a significant quantitative component will also be considered.
- Three letters of recommendation.
- A curriculum vitae.
- A letter of intent or personal statement outlining goals for graduate studies.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Comprehensive Examination Requirements

- Within Years 1 and 2, students must complete a two-part comprehensive examination: 1) an in-class written comprehensive exam and 2) a research comprehensive exam.
- Students must attempt the in-class written comprehensive exam by the end of Year 1. If a student fails this portion of the comprehensive exam, one further attempt will be allowed by the end of Year 2. Students who achieve A or A+ grades in all required coursework are exempt from the in-class written exam.
- Students must attempt the research comprehensive exam by the beginning of Year 2, which includes a technical report and an oral presentation. If a student fails this portion of the comprehensive exam, one further attempt will be allowed at the end of Year 2.
- Students must pass both the in-class written exam and the research exam to continue in the program.

Thesis Requirements

Conducting original research is the most important part of doctoral work. The thesis document must constitute significant and original contribution to the field. Students will have yearly meetings with a committee of no less than three faculty members to assess their progress. The completed thesis must be presented and defended within the Department of Statistical Sciences in addition to being presented and defended at the School of Graduate Studies.

Residency Requirements

Students must also satisfy a two-year residency requirement, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years

Time Limit

6 years

PhD Program (Direct-Entry)

Minimum Admission Requirements

- Admission to the PhD program is competitive, and applicants are admitted under the General Regulations of the School of Graduate Studies.
• Applicants may be accepted via direct entry with a bachelor’s degree in statistics from a recognized university with at least an A– average. The department also encourages applicants from biostatistics, computer science, economics, engineering, mathematics, physics, or any discipline where there is a significant quantitative component.
• Three letters of recommendation.
• A curriculum vitae.
• A letter of intent or personal statement outlining goals for graduate studies.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

Course Requirements

• During Year 1, students must complete the following 3.0 full-course equivalents (FCEs):
  o STA2111H Probability Theory I.
  o STA2211H Probability Theory II.
  o STA2101H Methods of Applied Statistics I.
  o STA2201H Methods of Applied Statistics II.
• Students must complete an additional 2.0 FCEs at the graduate level. The additional courses must be approved by the Associate Chair of Graduate Studies.

Comprehensive Examination Requirements

• Within Years 1 and 2, students must complete a two-part comprehensive examination: 1) an in-class written comprehensive exam and 2) a research comprehensive exam.
  o Students must attempt the in-class written comprehensive by the end of Year 1. If a student fails this portion of the comprehensive exam, one further attempt will be allowed by the end of Year 2. Students who achieve A or A+ grades in all required coursework are exempt from the in-class written exam.
  o Students must attempt the research comprehensive exam by the beginning of Year 2, which includes a technical report and an oral presentation. If a student fails this portion of the comprehensive exam, one further attempt will be allowed at the end of Year 2.
  o Students must pass both the in-class written exam and the research exam to continue in the program.

Thesis Requirements

Conducting original research is the most important part of doctoral work. The thesis document must constitute significant and original contribution to the field. Students will have yearly meetings with a committee of no less than three faculty members to assess their progress. The completed thesis must be presented and defended within the Department of Statistical Sciences in addition to being presented and defended at the School of Graduate Studies.

Residency Requirements

Students must also satisfy a three-year residency requirement, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

5 years

Time Limit

7 years

Field: Actuarial Science and Mathematical Finance

PhD Program

Minimum Admission Requirements

• Admission to the PhD program is competitive, and applicants are admitted under the General Regulations of the School of Graduate Studies.
• Applicants may be accepted with a master’s degree in statistics from a recognized university with at least a B+ average. Applicants with degrees in biostatistics, computer science, economics, engineering, mathematics, physics, or any discipline where there is a significant quantitative component will also be considered.
• Three letters of recommendation.
• A curriculum vitae.
• A letter of intent or personal statement outlining goals for graduate studies.
• Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See General Regulations section 4.3 for requirements.

Program Requirements

Course Requirements

• During Year 1, students must complete the following 3.0 full-course equivalents (FCEs):
  o All of:
    • STA2111H Probability Theory I,
    • STA2211H Probability Theory II,
    • STA2503H Applied Probability for Mathematical Finance.
  o One of:
    • STA4246H Research Topics in Mathematical Finance
    • STA2501H Mathematical Risk Theory.
  o Either:
    • STA3000Y Advanced Theory of Statistics
• STA2101H Methods of Applied Statistics I and STA2201H Methods of Applied Statistics II.

Comprehensive Examination Requirements

• Within Years 1 and 2, students must complete a two-part comprehensive examination: 1) an in-class written comprehensive exam and 2) a research comprehensive exam.
  o Students must attempt the in-class written comprehensive by the end of Year 1. If a student fails this portion of the comprehensive exam, one further attempt will be allowed by the end of Year 2. Students who achieve A or A+ grades in all required coursework are exempt from the in-class written exam.
  o Students must attempt the research comprehensive exam by the beginning of Year 2, which includes a technical report and an oral presentation. If a student fails this portion of the comprehensive exam, one further attempt will be allowed at the end of Year 2.
  o Students must pass both the in-class written exam and the research exam to continue in the program.

Thesis Requirements

Conducting original research is the most important part of doctoral work. The thesis document must constitute significant and original contribution to the field. Students will have yearly meetings with a committee of no less than three faculty members to assess their progress. The completed thesis must be presented and defended within the Department of Statistical Sciences in addition to being presented and defended at the School of Graduate Studies.

Residency Requirements

Students must also satisfy a three-year residency requirement, whereby students must be on campus full-time and consequently in geographical proximity to be able to participate fully in the University activities associated with the program.

Program Length

4 years

Time Limit

6 years

Statistical Sciences: Statistics MSc, PhD Courses

The department offers a selection of courses each year from the following list with the possibility of additions. The core courses will be offered each year. Consult the department for courses offered in the current academic year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>STA1001H</td>
<td>Applied Regression Analysis</td>
</tr>
<tr>
<td>STA1002H</td>
<td>Methods of Data Analysis</td>
</tr>
<tr>
<td>STA1003H</td>
<td>Sample Survey Theory and its Application</td>
</tr>
<tr>
<td>STA1004H</td>
<td>Introduction to Experimental Design</td>
</tr>
<tr>
<td>STA1007H</td>
<td>Statistics for Life and Social Scientists</td>
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<tr>
<td>JAS1101H</td>
<td>Topics in Astrostatistics</td>
</tr>
<tr>
<td>STA2005H</td>
<td>Applied Multivariate Analysis</td>
</tr>
<tr>
<td>STA2006H</td>
<td>Applied Stochastic Processes</td>
</tr>
<tr>
<td>STA2016H</td>
<td>Theory and Methods for Complex Spatial Data (prerequisite: STA302H1)</td>
</tr>
<tr>
<td>STA2051H</td>
<td>Topics in Numerical Methods in Data Science</td>
</tr>
<tr>
<td>STA2052H</td>
<td>Statistics, Ethics, and Law</td>
</tr>
<tr>
<td>STA2080H</td>
<td>Fundamentals of Statistical Genetics</td>
</tr>
<tr>
<td>STA2101H</td>
<td>Methods of Applied Statistics I</td>
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<tr>
<td>STA2102H</td>
<td>Computational Techniques in Statistics</td>
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<tr>
<td>STA2104H</td>
<td>Statistical Methods for Machine Learning and Data Mining</td>
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<tr>
<td>STA2111H</td>
<td>Probability Theory I</td>
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<tr>
<td>STA2112H</td>
<td>Mathematical Statistics I</td>
</tr>
<tr>
<td>STA2163H</td>
<td>Online Learning and Sequential Decision Theory</td>
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<tr>
<td>STA2201H</td>
<td>Methods of Applied Statistics II</td>
</tr>
<tr>
<td>STA2202H</td>
<td>Time Series Analysis</td>
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<tr>
<td>STA2211H</td>
<td>Probability Theory II</td>
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<tr>
<td>STA2212H</td>
<td>Mathematical Statistics II</td>
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<tr>
<td>STA2453H</td>
<td>Data Science Methods, Collaboration, and Communication</td>
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<td>STA2501H</td>
<td>Mathematical Risk Theory</td>
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<tr>
<td>STA2502H</td>
<td>Stochastic Models in Investments</td>
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<tr>
<td>STA2503H</td>
<td>Applied Probability for Mathematical Finance</td>
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<td>STA2505H</td>
<td>Credibility Theory and Simulation Finance</td>
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<td>STA2530H</td>
<td>Applied Time-Series Analysis</td>
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<tr>
<td>STA2535H</td>
<td>Life Insurance Mathematics</td>
</tr>
<tr>
<td>STA2536H</td>
<td>Data Science for Risk Modelling</td>
</tr>
<tr>
<td>STA2540H</td>
<td>Insurance Risk Management</td>
</tr>
<tr>
<td>STA2546H</td>
<td>Data Analytics in Practice</td>
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<tr>
<td>STA2550H</td>
<td>Industrial Seminar Series</td>
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<tr>
<td>STA2551H</td>
<td>Finance and Insurance Case Studies</td>
</tr>
<tr>
<td>STA2555H</td>
<td>Information Visualization</td>
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<td>Course Title</td>
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<tr>
<td>STA2560Y</td>
<td>Industrial Internship</td>
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<tr>
<td>STA2570H</td>
<td>Numerical Methods for Finance and Insurance</td>
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<tr>
<td>STA2600H</td>
<td>Teaching and Learning of Statistics in Higher Education</td>
</tr>
<tr>
<td>STA2700H</td>
<td>Computational Inference and Graphical Models</td>
</tr>
<tr>
<td>STA3000Y</td>
<td>Advanced Theory of Statistics</td>
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<tr>
<td>STA3431H</td>
<td>Monte Carlo Methods</td>
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<tr>
<td>STA4000H, Y</td>
<td>Supervised Reading Project I</td>
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<tr>
<td>STA4001H, Y</td>
<td>Supervised Reading Project II</td>
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<tr>
<td>STA4002H</td>
<td>Supervised Reading Project for an Advanced Special Topic</td>
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<tr>
<td>STA4246H</td>
<td>Research Topics in Mathematical Finance</td>
</tr>
<tr>
<td>STA4273H</td>
<td>Research Topics in Statistical Machine Learning</td>
</tr>
<tr>
<td>STA4364H</td>
<td>Conditional Inference: Sample Space Analysis</td>
</tr>
<tr>
<td>STA4372H</td>
<td>Foundations of Statistical Inference</td>
</tr>
<tr>
<td>STA4412H</td>
<td>Topics in Theoretical Statistics Modular Courses</td>
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<tr>
<td>STA4500H</td>
<td>Statistical Dependence: Copula Models and Beyond</td>
</tr>
<tr>
<td>STA4501H</td>
<td>Functional Data Analysis and Related Topics</td>
</tr>
<tr>
<td>STA4502H</td>
<td>Topics in Stochastic Processes</td>
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<tr>
<td>STA4505H</td>
<td>Applied Stochastic Control: High Frequency and Algorithmic Trading</td>
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<tr>
<td>STA4506H</td>
<td>Non-stationary Time Series Analysis</td>
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<tr>
<td>STA4507H</td>
<td>Extreme Value Theory and Applications</td>
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<td>STA4508H</td>
<td>Topics in Likelihood Inference</td>
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<tr>
<td>STA4509H</td>
<td>Insurance Risk Models I</td>
</tr>
<tr>
<td>STA4510H</td>
<td>Insurance Risk Models II</td>
</tr>
<tr>
<td>STA4512H</td>
<td>Logical Foundations of Statistical Inference</td>
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<tr>
<td>STA4514H</td>
<td>Modelling and Analysis of Spatially Correlated Data</td>
</tr>
<tr>
<td>STA4515H</td>
<td>Multiple Hypothesis Testing and its Applications</td>
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<tr>
<td>STA4516H</td>
<td>Topics in Probabilistic Programming</td>
</tr>
<tr>
<td>STA4517H</td>
<td>Foundations and Trends in Causal Inference</td>
</tr>
<tr>
<td>STA4518H</td>
<td>Robust Statistical Methods (prerequisite: STA2112H or permission)</td>
</tr>
<tr>
<td>STA4519H</td>
<td>Optimal Transport: Theory and Algorithms (prerequisites: STA2111H and STA2211H, or permission by the instructor)</td>
</tr>
<tr>
<td>STA4522H</td>
<td>The Measurement of Statistical Evidence</td>
</tr>
<tr>
<td>STA4523H</td>
<td>Bayesian Computation with Massive Data and Intractable Likelihoods</td>
</tr>
<tr>
<td>STA4524H</td>
<td>Advanced Topics in Statistical Genetics</td>
</tr>
<tr>
<td>STA4525H</td>
<td>Demographic Methods</td>
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<tr>
<td>STA4526H</td>
<td>Stochastic Control and Applications in Finance</td>
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<tr>
<td>STA4527H</td>
<td>Random Matrix Theory and Its Applications</td>
</tr>
<tr>
<td>STA4528H</td>
<td>Dependence Modelling With Application to Risk Management</td>
</tr>
<tr>
<td>STA4529H</td>
<td>Applications of Nonstandard Analysis to Statistics and Probability Theory</td>
</tr>
<tr>
<td>STA4530H</td>
<td>Derivatives for Institutional Investing</td>
</tr>
</tbody>
</table>

*Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

**Note:** The following modular courses are each worth 0.25 full-course equivalent (FCE).
Theoretical Astrophysics

Theoretical Astrophysics: Introduction

Faculty Affiliation
Arts and Science

Degree Programs
The Canadian Institute for Theoretical Astrophysics (CITA) does not offer an independent graduate degree program. Students interested in theoretical astrophysics are encouraged to enrol in the graduate programs offered by cognate departments such as Astronomy and Astrophysics, Chemistry, and Physics.

All CITA faculty hold cross-appointments in one or more of these departments; students seeking research supervision by CITA faculty are welcome to inquire. CITA research fellows and visitors are also encouraged to work with graduate students.

Overview
Established in 1984, the Canadian Institute for Theoretical Astrophysics (CITA) is a national institute specializing in theoretical astrophysics. CITA is supported by the University of Toronto, the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Canadian Institute for Advanced Research (CIFAR).

CITA owns an extensive and powerful network of workstations, including a 200-node, 1600-core Beowulf computing cluster. CITA also uses the 30,000 core computing cluster housed at the SciNet consortium at the University of Toronto.

The research activities at CITA span most of the areas of modern theoretical astrophysics, including accretion disks, active galactic nuclei, general relativity, and gravitational waves, cosmology and cosmological aspects of particle physics, the cosmic microwave background, gravitational lenses, dark matter, galaxy formation, galaxy structure and evolution, dynamics of stellar systems, physics and chemistry of the interstellar medium, star formation, stellar evolution, novae, supernovae, compact objects and gamma-ray bursts, nucleosynthesis, solar system formation and dynamics, and comets.

CITA has the support of over 50 faculty members from about 20 Canadian universities. CITA also maintains a rotating complement of more than 30 postdoctoral fellows and research associates, and hosts an active program of visitors from other universities. The theoretical interests of many CITA staff are complemented by observational research. CITA researchers have active observing programs at a wide variety of ground-based and satellite telescopes in many different wavelength bands.

Contact and Address
Web: www.cita.utoronto.ca
Email: office@cita.utoronto.ca
Telephone: (416) 978-6879
Fax: (416) 978-3921

Canadian Institute for Theoretical Astrophysics (CITA) / L'institut canadien d'astrophysique thorique (ICAT)
University of Toronto
Room 1403, McLennan Physical Laboratories
Toronto, Ontario M5S 3H8
Canada

Theoretical Astrophysics: Graduate Faculty

Full Members
Bond, J. Richard - BSc, MS, PhD, FRSC, FRS
Martin, Peter - BSc, MSc, PhD, FRSC, OC
Murray, Norman - BSc, PhD, CRC
Pen, Ue-Li - BSc, PhD
Pfeiffer, Harald - MSc, PhD, CRC
Thompson, Christopher - BSc, PhD
Women and Gender Studies

Women and Gender Studies: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Women and Gender Studies

MA and PhD

Collaborative Specializations

The following collaborative specializations are available to students in participating degree programs as listed below:

- Aging, Palliative and Supportive Care Across the Life Course
  - Women and Gender Studies, MA
- Bioethics
  - Women and Gender Studies, MA
- Contemporary East and Southeast Asian Studies
  - Women and Gender Studies, MA
- Development Policy and Power
  - Women and Gender Studies, MA
- Diaspora and Transnational Studies
  - Women and Gender Studies, MA, PhD
- Environment and Health
  - Women and Gender Studies, MA, PhD
- Environmental Studies
  - Women and Gender Studies, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - Women and Gender Studies, MA, PhD
- Jewish Studies
  - Women and Gender Studies, MA
- Sexual Diversity Studies
  - Women and Gender Studies, MA, PhD
- South Asian Studies
  - Women and Gender Studies, MA, PhD
- Women’s Health
  - Women and Gender Studies, MA, PhD
- Workplace Learning and Social Change
  - Women and Gender Studies, MA

Overview

The overall graduate program is cutting edge for its focus on transnational feminist studies. Graduate students and faculty investigate how gender and sexuality are informed, lived, and reinvented amidst entwined yet discrepant narratives, geographies, and histories.

Graduate work at the Women and Gender Studies Institute (WGSI) encourages an engagement with an interdisciplinary range of theories and methods that grapple with how gender and sexuality are entangled with questions of race, citizenship, embodiment, colonialism, nation, global capitalism, violence, political economy, cultural formations, aesthetics, and other pressing concerns.

The core faculty brings transnational feminist commitments to the study of diverse sites and their interconnection with particular focus on Canada, the Caribbean, Africa, the Middle East, South Asia, East Asia, and the United States. In doing so, the institute seeks to ask feminist questions as well as put feminism into question.

Areas of focus within the transnational feminist approach include:

- gender, sexuality and queer studies
- political economy and critical development studies
- feminist studies of technology, science, environment and biomedicine
- feminist cultural studies.

The MA and PhD degree programs also feature the option of a practicum that aspires to strengthen students’ ability to interrogate the application of theories and methods to lived practice.

Contact and Address

Web: [www.wgsi.utoronto.ca/graduate](http://www.wgsi.utoronto.ca/graduate)
Email: wgsi.programs@utoronto.ca
Telephone: (416) 978-3668
Fax: (416) 946-5561

Graduate Program in Women and Gender Studies
Women and Gender Studies Institute, University of Toronto
Wilson Hall, New College, 40 Willcocks Street
Toronto, Ontario M5S 1C6 Canada

Women and Gender Studies: Graduate Faculty

Full Members

Bamford, Sandra - BA, MA, MPA, PhD
Bhuyan, Rupaleem - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Boler, Megan - BA, PhD
Brown, Elspeth - MA, PhD
Charles, Nicole - BA, MA, PhD
Cobb, Michael - BA, MA, AM, PhD
Coloma, Roland Sintos - TD, BA, MA, MA, PhD
Columpar, Corinn - BA, PhD
Cossman, Brenda - LLB, LLM, Goodman/Schipper Chair
Cowen, Deborah - BA, MCP, PhD
Dave, Naisargi N. - BA, MA, PhD
Dehl, Kari - BA, MA, PhD
Diaz, Robert - PhD
Women and Gender Studies: Women and Gender Studies MA

Master of Arts

Program Description

The MA program in Women and Gender Studies focuses on feminist colonial, post-colonialism, diasporic, and transnational studies as rubrics for studying gender, sex, and feminism. This perspective explores the temporal and geographic processes through which women’s and men’s lives, sexed relations, gendered subjectivities, and sexualities are situated.

Women and Gender Studies: Women and Gender Studies PhD

Doctor of Philosophy

Program Description

The PhD program in Women and Gender Studies has four areas of focus:

- gender, sexuality, and queer studies
- feminist cultural studies
- feminist studies of technology, science, environment, and biomedicine
- transnational political economy and development studies.

The offerings bring feminist scholarship to the tasks of challenging and investigating colonial, postcolonial, and transnational contexts. Central themes of the program include global capitalism, nation and state formation, empire, citizenship, diaspora, and cultural flows, all of which are examined through the lenses of diverse feminist scholarship. The program welcomes applications from international students.

Applicants may enter the PhD program via one of two routes:

- following completion of an appropriate MA
- direct entry after completing a bachelor’s degree.

**PhD Program**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Women and Gender Studies Institute’s additional admission requirements stated below.
- A master’s degree in women and gender studies, or a master’s degree in a related discipline from a recognized university. Applicants must have obtained an average of A– or better in the master’s program.
- Letter of intent outlining the academic goals the applicant wishes to pursue in the program, two letters of recommendation, a writing sample, and transcripts from all post-secondary institutions.

**Program Requirements**

- The student’s program of study must be approved by the Women and Gender Studies Institute.
- All coursework should normally be completed by the end of Year 1 of PhD study. Students must complete 3.0 full-course equivalents (FCEs) as follows:
  - 1.0 FCE in Women and Gender Studies (WGS5000H and WGS5001H). Students who have already taken these courses, or their equivalent, will be required to enrol in alternate course selections, with institute approval.
  - 0.5 elective FCE in Women and Gender Studies.
  - 1.5 FCEs offered in Women and Gender Studies or by other graduate units and chosen in consultation with the student’s faculty advisor.
- Completion of WGS2000H (0.0 FCE), a credit/non-credit course, requiring participation in the WGS Research Seminar Series. Normally, students enrol in WGS2000H in Year 1 of their PhD program. Attendance at 80% of the seminars is required. After completion of this course, students are recommended to attend this seminar regularly, as a crucial part of their graduate education. In addition, students must present their research in the seminar once before graduating.
- Comprehensive examinations:
  - Completion of two comprehensive exams, one in a primary and one in a secondary area of study, defined in consultation with the advisor and other committee members.
  - The dissertation proposal, an integral part of the comprehensive exams, should be defended and accepted no later than August 31 of Year 2.
  - Examinations are marked on a pass/fail basis. Candidates are allowed two attempts to pass a comprehensive examination. A failure to pass on the second attempt results either in the student’s voluntary withdrawal from the program, or a recommendation by the institute for termination of the student’s registration in the program.
  - Comprehensives should be completed by April 30 of Year 2.
- Completion of a PhD dissertation based on original research conducted by the candidate on an approved topic in women and gender studies, and successful defence at the SGS Final Oral Examination.
- Each student will meet at least annually with their supervisor and other doctoral committee members to review academic progress and to consult about future directions.

**Program Length**

4 years

**Time Limit**

6 years

**PhD Program (Direct-Entry)**

**Minimum Admission Requirements**

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Women and Gender Studies Institute’s additional admission requirements stated below.
- In exceptional cases, direct-entry admission is offered to outstanding students with a bachelor’s degree in women and gender studies or a related area, from a recognized university. Direct-entry students must have a cumulative average of A or better. Applicants must also have obtained an average equivalent to an A– or better in their final year of undergraduate study.
- Letter of intent outlining the academic goals the applicant wishes to pursue in the program, two letters of recommendation, a writing sample, and transcripts from all post-secondary institutions.

**Program Requirements**

- The student’s program of study must be approved by the Women and Gender Studies Institute.
- All coursework should normally be completed by the end of Year 2 of PhD study. Students must complete 5.0 full-course equivalents (FCEs) as follows:
1.0 FCE in Women and Gender Studies (WGS5000H and WGS5001H).
2.0 elective FCEs in Women and Gender Studies.
2.0 FCEs offered in Women and Gender Studies or by other graduate units and chosen in consultation with the student’s faculty advisor.

• Completion of WGS2000H (0.0 FCE), a credit/non-credit course, requiring participation in the WGS Research Seminar Series. Normally, students will enrol in WGS2000H in Year 1 of their PhD program. Attendance at 80% of the seminars is required. After completion of this course, students are recommended to attend this seminar regularly, as a crucial part of their graduate education. In addition, students must present their research in the seminar once before graduating.

• **Comprehensive examinations:**
  o Completion of two comprehensive exams, one in a primary and one in a secondary area of study, defined in consultation with the advisor and other committee members.
  o The dissertation proposal, an integral part of the comprehensive exams, should be defended and accepted no later than December 31 of Year 2.
  o Examinations are marked on a pass/fail basis. Candidates are allowed two attempts to pass a comprehensive examination. A failure to pass on the second attempt results either in the student’s voluntary withdrawal from the program or a recommendation by the institute for termination of the student’s registration in the program.
  o Comprehensives should be completed by September 30 of Year 2.

• Completion of a **PhD dissertation** based on original research conducted by the candidate on an approved topic in women and gender studies, and successful defence at the SGS Final Oral Examination.

• Each student will meet at least annually with their supervisor and other doctoral committee members to review **academic progress** and to consult about future directions.

**Program Length**

5 years

**Time Limit**

7 years

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### Women and Gender Studies: Women and Gender Studies MA, PhD Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGS1004H</td>
<td>Special Topics in Feminist Theory</td>
</tr>
<tr>
<td>WGS1005Y</td>
<td>MA Research Paper</td>
</tr>
<tr>
<td>WGS1007H</td>
<td>Directed Research/Reading</td>
</tr>
<tr>
<td>WGS1009H</td>
<td>Special Topics in Feminist Studies 1</td>
</tr>
<tr>
<td>WGS1010H</td>
<td>Special Topics in Feminist Studies 2</td>
</tr>
<tr>
<td>WGS1011H</td>
<td>Special Topics in Feminist Studies 3</td>
</tr>
<tr>
<td>WGS1013H</td>
<td>Special Topics in Feminist Theory 1</td>
</tr>
<tr>
<td>WGS1014H</td>
<td>Special Topics in Feminist Theory 2</td>
</tr>
<tr>
<td>WGS1016H</td>
<td>Migration, Mobility, and Displacement in Contemporary Africa</td>
</tr>
<tr>
<td>WGS1017H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WGS1018H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WGS1019H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WGS1020H</td>
<td>Gender and Globalization: Transnational Perspectives</td>
</tr>
<tr>
<td>WGS1021H</td>
<td>Black Diasporic Feminisms: Modernity, Freedom, Belonging</td>
</tr>
<tr>
<td>WGS1022H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WGS1023H</td>
<td>Studies in Aesthetic Expression and Radical Hope</td>
</tr>
<tr>
<td>WGS1024H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WGS1025H</td>
<td>Indigenous Aesthetics: Hip Hop, Media, and Futurities</td>
</tr>
<tr>
<td>WGS1026H</td>
<td>Special Topics in Race and Feminism</td>
</tr>
<tr>
<td>WGS1027H</td>
<td>Special Topics in Queer Studies and Feminism</td>
</tr>
<tr>
<td>WGS1028H</td>
<td>Queer of Colour Critique</td>
</tr>
<tr>
<td>WGS5000H</td>
<td>Feminist Theories, Histories, Movements I</td>
</tr>
<tr>
<td>WGS5001H</td>
<td>Feminist Theories, Histories, Movements II</td>
</tr>
</tbody>
</table>
Collaborative Specializations

The School of Graduate Studies offers approximately 40 graduate collaborative specializations (CSs). This specialization category emerges from cooperation between two or more graduate units and their graduate programs. The student has a broader base from which to explore a novel interdisciplinary area or some special development in a particular discipline.

The student must be admitted to, and enrol in, one of the collaborating graduate units (known as a “home” unit) and must fulfil all the requirements of the degree program in the home unit and any additional requirements of the CS. Each CS is designed to allow a focus in the area of specialty. On successful completion of the specialization, the student receives a transcript notation indicating completion of the collaborative specialization, in addition to the degree.
Addiction Studies

Addiction Studies: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Counselling and Clinical Psychology (Clinical Psychology field) — MA, PhD
Criminology and Sociological Studies — MA, PhD
Medical Science — MSc, PhD
Nursing Science — PhD
Pharmaceutical Sciences — MSc, PhD
Pharmacology — MSc, PhD
Psychology — MA, PhD
Public Health Sciences — MPH, MSc, PhD
Social Work — MSW, PhD
Sociology — MA, PhD

Overview

The graduate programs listed above, in collaboration with the Centre for Addiction and Mental Health and the Ontario Tobacco Research Unit, participate in the Collaborative Specialization in Addiction Studies at the University of Toronto. The purpose of the Addiction Studies specialization is to develop and integrate graduate training in the multidisciplinary field of addictions, an area that includes the use and abuse of alcohol, tobacco, and psychoactive substances, as well as gambling and other addictive behaviours. Master's programs requiring a thesis, practicum, or research paper, and doctoral programs are included. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Addiction Studies” on their transcript.

Contact and Address

Web: www.dlsph.utoronto.ca/program/collaborative-specialization-in-addiction-studies

Hayley Hamilton, PhD
Scientist, Centre for Addiction and Mental Health
Associate Professor, Dalla Lana School of Public Health, University of Toronto
33 Russell Street, Toronto, Ontario M5S 2S1
Telephone: 416-535-8501 ext. 36353
Hayley.Hamilton@camh.ca

Addiction Studies: Master's Level

Admission Requirements

- Applicants must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. They must contact the collaborating professor within their graduate unit directly.

Specialization Requirements

- Students must meet all requirements of their home graduate unit in terms of coursework and thesis work, or equivalent.
- Master's students in the collaborative specialization are required to take PAS3700H *Multidisciplinary Aspects of Addictions*, plus 0.5 full-course equivalent (FCE) selected from the list of approved elective courses presented below or an approved directed reading course.
- The student's thesis must deal with a subject in the field of addictions. The thesis is supervised and evaluated in the same manner as others in the home graduate unit, but normally involves, as appropriate, supervisory and examining professors from other disciplines represented in the collaborative specialization. In collaborating graduate units that do not require a thesis, a practicum or major research paper will be accepted instead of a thesis, as long as the topic or focus is directly related to addictions. In collaborating graduate units that do not have a thesis or equivalent requirement, students must take a third 0.5 FCE from the list of approved electives.

Addiction Studies: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. They must contact the collaborating professor within their graduate unit directly.
Specialization Requirements

- Doctoral students in the collaborative specialization are required to take PAS3700H *Multidisciplinary Aspects of Addictions*, if they have not already done so, plus an additional 0.5 full-course equivalent (FCE) (not taken previously) from the approved listing of elective courses presented below or an approved directed reading course.
- Students must meet all requirements of their home graduate unit in terms of coursework and thesis work, or equivalent.
- The student's thesis must deal with a subject in the field of addictions. The thesis is supervised and evaluated in the same manner as others in the home graduate unit, but normally involves, as appropriate, supervisory and examining professors from other disciplines represented in the collaborative specialization. In collaborating graduate units that do not require a thesis, a practicum or major research paper will be accepted instead of a thesis, as long as the topic or focus is directly related to addictions. In collaborating graduate units that do not have a thesis or equivalent requirement, students must take a third 0.5 FCE from the list of approved electives.

Addiction Studies: Courses

Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS3700H</td>
<td>Multidisciplinary Aspects of Addictions</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD1291H</td>
<td>Addictive Behaviours: Approaches to Assessment and Intervention</td>
</tr>
<tr>
<td>CHL5120H</td>
<td>Population Health Perspectives on Mental Health and Addictions</td>
</tr>
<tr>
<td>CHL5417H</td>
<td>Tobacco and Health: From Cells to Society</td>
</tr>
<tr>
<td>CRI2040H</td>
<td>Drugs and Crime</td>
</tr>
<tr>
<td>JPM1005Y</td>
<td>Behavioural Pharmacology</td>
</tr>
<tr>
<td>MSC1085H</td>
<td>Molecular Approaches to Mental Health and Addictions</td>
</tr>
<tr>
<td>PAS3701H</td>
<td>Advanced Research Issues in Addictions</td>
</tr>
<tr>
<td>SWK4616H</td>
<td>Drug Dependencies: Interventive Approaches</td>
</tr>
</tbody>
</table>
Aging, Palliative and Supportive Care Across the Life Course

Aging, Palliative and Supportive Care Across the Life Course: Introduction

Lead Faculty of the Collaborative Specialization

Social Work

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Anthropology — MA, MSc, PhD
Counselling and Clinical Psychology — MA, PhD
Counselling Psychology — MEd, EdD
Dentistry — MSc, PhD
Health Administration — MHSc
Health Policy, Management and Evaluation — MSc, PhD
Information — MI, PhD
Kinesiology — MSc, PhD
Medical Science — MSc, PhD
Music — MA, PhD
Nursing Science — MN, PhD
Pharmaceutical Sciences — MSc, PhD
Psychology — MA, PhD
Public Health Sciences — MPH, MSc, PhD
Rehabilitation Science — MSc, PhD
Social Work — MSW, PhD
Sociology — MA, PhD
Speech-Language Pathology — MSc, PhD
Women and Gender Studies — MA

Overview

The Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course prepares students for specialization in the field of aging and/or the field of palliative and supportive care, with an emphasis on viewing aging and palliative issues within the perspective of the life course. The collaborative specialization offers students two options of study:

- aging and the life course;
- palliative and supportive care.

Students must apply to and register in a home participating unit (i.e., one of the graduate programs listed above), and follow a course of study acceptable to both the graduate unit and the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course" on their transcript.

Contact and Address

Web: www.aging.utoronto.ca
Telephone: (416) 978-0377
Email: aging@utoronto.ca

Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course
University of Toronto
Room 238, 246 Bloor Street West
Toronto, Ontario M5S 1V4
Canada

Aging, Palliative and Supportive Care Across the Life Course: Master's Level

Admission Requirements

- Applicants must apply to a participating graduate unit and comply with the admission procedures of that unit. Applicants may apply concurrently to their participating graduate unit and to the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course.
- Applicants must forward the following to the committee of the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course:
  - a. A copy of the School of Graduate Studies application form submitted to the participating graduate unit.
  - b. Copies of official undergraduate and graduate transcripts from all institutions previously or currently attended.
  - c. A résumé or curriculum vitae (CV).
  - d. A letter explaining how their course of study and specific research interests relate to either option 1 in aging and the life course, or option 2 in palliative and supportive care at the graduate level.
- Students may use copies of official documents (a. and b. above) for their application to the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course. These may be obtained from their home participating graduate unit.
Specialization Requirements

MA in Adult Education and Community Development;
MA and MSc in Anthropology;
MA in Counselling and Clinical Psychology;
MEd in Counselling Psychology;
MSc in Dentistry;
MHSc in Health Administration;
MSc in Health Policy, Management and Evaluation;
Master of Information (Thesis and Co-op Options);
MSc in Kinesiology;
MSc in Medical Science;
MA in Music;
Master of Nursing;
MSc in Pharmaceutical Sciences;
MA in Psychology;
Master of Public Health;
MSc in Rehabilitation Science;
Master of Social Work;
MA in Sociology;
MSc in Speech-Language Pathology;
MA in Women and Gender Studies

In addition to meeting the program requirements of their home graduate unit, students must complete:

- The core course (0.5 full-course equivalent [FCE]) for the chosen option (i.e., aging and the life course or palliative and supportive care).
- One elective course (0.5 FCE) from a) the chosen option's pre-approved elective list or b) the student's home graduate unit list of courses and/or other graduate-level elective courses, provided the focus of the student’s assignments is in the area of this specialization (aging or palliative) and the course is approved by the specialization committee as a suitable elective.
- The major research paper, thesis, or practicum in the participating degree program will be on a topic in the chosen option of this specialization.

Specialization Requirements

Master of Information (Coursework-Only Option)

In addition to meeting the program requirements of their home graduate unit, students must complete:

- The core course (0.5 full-course equivalent [FCE]) for the chosen option (i.e., aging and the life course or palliative and supportive care).
- Four elective courses (2.0 FCEs), one of which can be a practicum course, from a) the chosen option's pre-approved elective list or b) the student's home graduate unit list of courses and/or graduate-level elective courses, where the topic of the major paper or practicum field is in the area of the chosen specialization (aging or palliative). Courses not on the pre-approved list must be approved by the collaborative specialization director and/or committee, after consultation with the Information faculty member associated with the collaborative specialization and, as needed, the course instructor, to count towards the collaborative specialization requirements.

Aging, Palliative and Supportive Care Across the Life Course: Doctoral Level

Admission Requirements

- Applicants must apply to a participating graduate unit and comply with the admission procedures of that unit.
- Applicants may apply concurrently to their participating graduate unit and to the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course.
- Applicants must forward the following to the collaborative specialization committee:
  - A copy of the School of Graduate Studies application form submitted to the participating graduate unit.
  - Copies of official undergraduate and graduate transcripts from all institutions previously or currently attended.
  - A resumé or curriculum vitae (CV).
  - A letter explaining how their course of study and specific research interests relate to either option 1 in aging and the life course, or option 2 in palliative and supportive care at the graduate level.
  - Two letters of reference.
- Students may use copies of official documents (i.e., application form and transcripts) for their application to the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course. These may be obtained from the participating home graduate unit.

Specialization Requirements

MEd in Adult Education and Community Development

In addition to meeting the program requirements of their home graduate unit, students must complete:

- The core course (0.5 full-course equivalent [FCE]) for the chosen option (i.e., aging and the life course or palliative and supportive care).
- Two elective courses (1.0 FCE) from a) the chosen option's pre-approved elective list or b) the student's home graduate unit list of courses and/or other graduate-level elective courses, provided the focus of the student’s assignments is in the area of this specialization (aging or palliative) and the course is approved by the specialization committee as a suitable elective.
Specialization Requirements

- In addition to meeting the program requirements of their home graduate unit, students will be required to complete both the master's- and doctoral-level core courses (0.5 full-course equivalent [FCE] each) and one elective course (0.5 FCE) for either of the two options. The master's-level course must be completed before enrolling in the doctoral-level course.
- It is expected that the student’s thesis or practicum (whichever is included in his or her program of study) would be in his or her chosen study areas (i.e., in either aging and the life course or palliative and supportive care).

Aging, Palliative and Supportive Care Across the Life Course: Courses

Core Courses for Option 1: Aging and the Life Course

Master's Level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE2000H</td>
<td>Principles of Aging</td>
</tr>
</tbody>
</table>

Doctoral Level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE3000H</td>
<td>Advanced Research Seminar in Aging and the Life Course (AGE2000H is a prerequisite for entry into the doctoral level of the collaborative specialization)</td>
</tr>
</tbody>
</table>

Core Courses for Option 2: Palliative and Supportive Care

Master's Level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE1000H</td>
<td>Multidisciplinary Research Concepts in Palliative and Supportive Care</td>
</tr>
</tbody>
</table>

Doctoral Level

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE1500H</td>
<td>Advanced Research Methodologies in Palliative and Supportive Care (AGE1000H is a prerequisite for entry into the doctoral level of the collaborative specialization)</td>
</tr>
</tbody>
</table>

Elective Courses for Option 1 or 2

Special topics courses can be taken as part of the program requirements of this collaborative specialization. Students must check their home graduate unit’s website for course availability in any given session.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE2500H</td>
<td>Current Research Topics in Aging and the Life Course</td>
</tr>
<tr>
<td>DEN1003H</td>
<td>Preventive Dentistry</td>
</tr>
<tr>
<td>NUR1057H</td>
<td>Interventions to Enhance Health, Abilities, and Well-Being</td>
</tr>
<tr>
<td>SLP1533Y</td>
<td>Aphasia</td>
</tr>
<tr>
<td>SLP1534H</td>
<td>Motor Speech Disorders</td>
</tr>
<tr>
<td>SOC6707H</td>
<td>Intermediate Data Analysis</td>
</tr>
<tr>
<td>SWK4614H</td>
<td>Social Work Practice in Palliative Care (social work students only)</td>
</tr>
<tr>
<td>SWK4618H</td>
<td>Special Issues in Gerontological Social Work</td>
</tr>
<tr>
<td>SWK4634H</td>
<td>Family Practice Across the Life Cycle</td>
</tr>
<tr>
<td>SWK4641H</td>
<td>Special Topics in Social Work in Gerontology</td>
</tr>
<tr>
<td>SWK4803H</td>
<td>Special Studies III</td>
</tr>
</tbody>
</table>

Requests to approve other courses as equivalent to fulfill collaborative specialization requirements may be made to the collaborative specialization committee. Students taking either option may choose the master's core course in the other option as an elective.

Additional Electives for Option 2 Only

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5301H</td>
<td>Introduction to Clinical Epidemiology and Health Care Research</td>
</tr>
<tr>
<td>HAD5730H</td>
<td>Economic Evaluation Methods for Health Service Research</td>
</tr>
<tr>
<td>HAD5771H</td>
<td>Resource Allocation Ethics</td>
</tr>
<tr>
<td>MSC1090H</td>
<td>Introduction to Computational Biostatistics with R</td>
</tr>
<tr>
<td>NUR1021H</td>
<td>Nursing Ethics</td>
</tr>
<tr>
<td>NUR1024H</td>
<td>Foundations of Qualitative Inquiry</td>
</tr>
<tr>
<td>NUR1025H</td>
<td>Doing Qualitative Research: Design and Data Collection</td>
</tr>
<tr>
<td>NUR1045H</td>
<td>Theories of Pain: Impact on the Individual, Family, and Society</td>
</tr>
<tr>
<td>NUR1046H</td>
<td>Persistent Illness: Theoretical, Research, and Practice Implications</td>
</tr>
<tr>
<td>NUR1050H</td>
<td>Coping With Illness</td>
</tr>
<tr>
<td>PHL2145H</td>
<td>Bioethics</td>
</tr>
<tr>
<td>PHL2146Y</td>
<td>Topics in Bioethics</td>
</tr>
</tbody>
</table>
Ancient and Medieval Philosophy

Ancient and Medieval Philosophy: Introduction

Lead Faculty of the Collaborative Specialization
Arts and Science

Participating Degree Programs
Classics — PhD
Medieval Studies — PhD
Philosophy — PhD

Overview

The graduate units listed above participate in the Collaborative Specialization in Ancient and Medieval Philosophy. The three units contribute courses and provide facilities and supervision of doctoral research. Ancient and Medieval Philosophy operates only at the doctoral level. The specialization is administered by a committee, which is drawn from all three units and is chaired by the director, who is a member of the committee.

Students who wish to enrol in the collaborative specialization must apply to and be admitted to both the doctoral program in one of the collaborating graduate units and the collaborative specialization. Upon successful completion of the doctoral degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Ancient and Medieval Philosophy” on their transcript.

Interested students should contact the director and the graduate coordinator of the unit in which they intend to register.

Contact and Address

Web: cpamp.utoronto.ca
Email: rachel.barney@utoronto.ca
Telephone: (416) 978-3178
Fax: (416) 978-8703

Ancient and Medieval Philosophy: Doctoral Level

Admission Requirements

- All applicants must meet the admission criteria of the unit through which they wish to enrol.

Specialization Requirements

- Students must fulfill the normal requirements of the PhD in their home unit.
- Students will normally concentrate in either ancient or medieval philosophy, though it is not necessary to indicate such specialization formally. Their plan of study must also be approved by the collaborative specialization committee and must include the following elements:
  - 1.0 full-course equivalent (FCE) in some area of philosophy other than the history of philosophy.
  - Successful completion of the proseminar (AMP2000Y).
  - A language competence examination at the appropriate level (in at least one of Greek, Classical or Medieval Latin, or Arabic, as relevant) consisting of unseen translation must be successfully completed before the major field or area examinations are first attempted.
  - Area, qualifying, or major field examinations must contain a paper involving translation from at least one of Greek, Classical or Medieval Latin, or Arabic (as appropriate to the area or field). This examination will be based on a substantial list of texts relevant to the field or area.
  - A reading knowledge of two modern languages other than English.
- In most cases, some of these elements will be fulfilled by program requirements in the doctoral program of the home unit.

Ancient and Medieval Philosophy: Courses

Required Course

AMP2000Y Collaborative Specialization in Ancient and Medieval Philosophy (CSAMP) Proseminar (Credit/No Credit)
Bioethics

Bioethics: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Health Administration — MHSc
Health Policy, Management and Evaluation — MSc, PhD
Law — LLM, SJD
Medical Science — MSc, PhD
Nursing Science — MN, PhD
Pharmaceutical Sciences — MSc, PhD
Philosophy — MA, PhD
Public Health Sciences — MPH, MSc, PhD
Rehabilitation Science — MSc, PhD
Religion — MA, PhD
Social Work — PhD
Women and Gender Studies — MA

Overview

The graduate units listed above participate in the Collaborative Specialization in Bioethics at the master’s and doctoral levels.

Applicants with an interest in bioethics register in one of the graduate units associated with the Collaborative Specialization in Bioethics. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Bioethics” on their transcript.

Contact and Address

Web: jcb.utoronto.ca
Email: jcb.ea@utoronto.ca
Telephone: (416) 978-1906
Fax: (416) 978-1911

Collaborative Specialization in Bioethics
Joint Centre for Bioethics (JCB)
University of Toronto
Suite 754, 155 College Street
Toronto, Ontario M5T 1P8
Canada

Bioethics: Master’s Level

Admission Requirements

- Applicants to the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Students interested in the master's programs apply to both the collaborating graduate unit and the Collaborative Specialization in Bioethics. Applications for admission to the collaborative specialization are considered only after admission to the collaborating graduate unit. If a student applies to more than one unit, a copy of each file must be submitted to the collaborative specialization at the contact above.
- Visit the Collaborative Specialization in Bioethics' website for the application form and details about supporting documentation. The application must be accompanied by:
  - application form
  - an up-to-date curriculum vitae (CV)
  - up-to-date copies of all transcripts
  - a one-page letter of intent
  - two letters of reference.
- Where a thesis is required, an email or note from the proposed supervisor indicating willingness to supervise the student should be submitted to the Collaborative Specialization in Bioethics at the contact above. The JCB website lists faculty and bioethicists who are available for advice relating to research proposals.

Specialization Requirements

- Students will be expected to meet the requirements of the home graduate unit as well as those of the Collaborative Specialization in Bioethics. Students should check with their home graduate program whether the collaborative specialization course requirements may be counted towards the degree.
- Students must complete:
  - SRM3333Y, a credit/no credit graduate seminar series in bioethics.
  - PHL2145H, a review of the philosophical foundations of bioethics. Students who have completed an equivalent graduate course in philosophical bioethics may apply to the Program Director to have this requirement waived.
  - Bioethics-related 0.5 full-course equivalent (FCE), normally from the suggested list below.
- Master's programs require either a thesis or equivalent research project as determined by the home unit. The thesis will be supervised by a thesis committee comprising a supervisor and two other members, at least one of whom is identified as an affiliated Collaborative Specialization in Bioethics faculty member. The thesis is evaluated according to the procedures and standards of the home graduate unit and must fall within the broad area of bioethics. Non-thesis projects require supervision; requirements for such projects will be determined by the home unit. Students in coursework-only degree programs must complete additional coursework in approved bioethics electives. For the Master of Laws (LLM) coursework-only option, 1.0 FCE in additional courses in bioethics are required.

- Students who have completed an equivalent graduate course in philosophical bioethics may apply to the Program Director to have this requirement waived.
- Bioethics-related 0.5 full-course equivalent (FCE), normally from the suggested list below.
- Master's programs require either a thesis or equivalent research project as determined by the home unit. The thesis will be supervised by a thesis committee comprising a supervisor and two other members, at least one of whom is identified as an affiliated Collaborative Specialization in Bioethics faculty member. The thesis is evaluated according to the procedures and standards of the home graduate unit and must fall within the broad area of bioethics. Non-thesis projects require supervision; requirements for such projects will be determined by the home unit. Students in coursework-only degree programs must complete additional coursework in approved bioethics electives. For the Master of Laws (LLM) coursework-only option, 1.0 FCE in additional courses in bioethics are required.

- Where a thesis is required, an email or note from the proposed supervisor indicating willingness to supervise the student should be submitted to the Collaborative Specialization in Bioethics at the contact above. The JCB website lists faculty and bioethicists who are available for advice relating to research proposals.

- Students must complete:
  - SRM3333Y, a credit/no credit graduate seminar series in bioethics.
  - PHL2145H, a review of the philosophical foundations of bioethics. Students who have completed an equivalent graduate course in philosophical bioethics may apply to the Program Director to have this requirement waived.
  - Bioethics-related 0.5 full-course equivalent (FCE), normally from the suggested list below.
- Master's programs require either a thesis or equivalent research project as determined by the home unit. The thesis will be supervised by a thesis committee comprising a supervisor and two other members, at least one of whom is identified as an affiliated Collaborative Specialization in Bioethics faculty member. The thesis is evaluated according to the procedures and standards of the home graduate unit and must fall within the broad area of bioethics. Non-thesis projects require supervision; requirements for such projects will be determined by the home unit. Students in coursework-only degree programs must complete additional coursework in approved bioethics electives. For the Master of Laws (LLM) coursework-only option, 1.0 FCE in additional courses in bioethics are required.
Bioethics: Doctoral Level

Admission Requirements

- Applicants to the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Students interested in the doctoral programs apply to both the collaborating graduate unit and the Collaborative Specialization in Bioethics. Applications for admission to the collaborative specialization are considered only after admission to the collaborating graduate unit. If a student applies to more than one unit, a copy of each file must be submitted to the collaborative specialization at the contact above.
- Visit the Collaborative Specialization in Bioethics website for the application form and details about supporting documentation. The application must be accompanied by:
  - application form
  - an up-to-date curriculum vitae (CV)
  - up-to-date copies of all transcripts
  - a one-page letter of intent
  - two letters of reference
- For the doctoral thesis, an email or note from the proposed supervisor indicating willingness to supervise the student should be submitted to the Collaborative Specialization in Bioethics at the contact above. The JCB website lists faculty and bioethicists who are available for advice relating to research proposals.

Specialization Requirements

- Students will be expected to meet the requirements of the home graduate unit as well as those of the Collaborative Specialization in Bioethics. Students should check with their home graduate program whether the collaborative specialization course requirements may be counted towards the degree.
- Students must complete:
  - SRD4444Y, a credit/no credit graduate seminar series in bioethics.
  - PHL2145H, a review of the philosophical foundations of bioethics. Students who have completed an equivalent graduate course in philosophical bioethics may apply to the collaborative specialization director to have this requirement waived.
  - Bioethics-related 0.5 full-course equivalent (FCE), normally from the suggested list below.
- All doctoral candidates must complete a thesis. The thesis will be supervised by a thesis committee comprising a supervisor and normally two other members, at least one of whom is identified as an affiliated Collaborative Specialization in Bioethics faculty member. The thesis is evaluated according to the procedures and standards of the home graduate unit and must fall within the broad area of bioethics.

Bioethics: Courses

Please note that these courses are not offered every year. Consult each unit's website for details.

Health Policy, Management and Evaluation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HAD5011H</td>
<td>Canada's Health Care System and Health Policy</td>
</tr>
<tr>
<td>HAD5306H</td>
<td>Introduction to Health Services Research and the Use of Health Administrative Data</td>
</tr>
<tr>
<td>HAD5741H</td>
<td>Health Law and Ethics</td>
</tr>
<tr>
<td>HAD5768H</td>
<td>International Perspectives on Health Services Management</td>
</tr>
<tr>
<td>HAD5771H</td>
<td>Resource Allocation Ethics</td>
</tr>
</tbody>
</table>

Law

Participation in LAW courses is at the discretion of the Faculty of Law upon presentation, to the Faculty of Law Records Office, of a signed permission form from the student's home graduate unit. Note that preference is given to JD students and that many LAW courses are full by the end of the Faculty of Law add/drop period.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>LAW6003Y</td>
<td>Health Law and Bioethics</td>
</tr>
<tr>
<td>LAW6006H</td>
<td>Public Health Law</td>
</tr>
<tr>
<td>LAW582H</td>
<td>Privacy, Property, and the Human Body</td>
</tr>
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Nursing Science

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<th>Course Code</th>
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</thead>
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<tr>
<td>NUR1021H</td>
<td>Nursing Ethics</td>
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Philosophy

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>PHL2131H</td>
<td>Ethics</td>
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<tr>
<td>PHL2132H</td>
<td>Seminar in Ethics</td>
</tr>
<tr>
<td>PHL2133H</td>
<td>Topics in Ethics</td>
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</table>

Public Health Sciences

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHL3001Y</td>
<td>Core Topics in Bioethics</td>
</tr>
<tr>
<td>CHL3002Y</td>
<td>Teaching Bioethics</td>
</tr>
<tr>
<td>CHL3003Y</td>
<td>Empirical Approaches in Bioethics</td>
</tr>
<tr>
<td>CHL3004Y</td>
<td>Ethics and Health Institutions</td>
</tr>
<tr>
<td>CHL3051H</td>
<td>Research Ethics</td>
</tr>
<tr>
<td>CHL5121H</td>
<td>Genomics, Bioethics, and Public Policy</td>
</tr>
<tr>
<td>Code</td>
<td>Course</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>CHL5401H</td>
<td>Epidemiologic Methods I</td>
</tr>
<tr>
<td>JRH5124H</td>
<td>Public Health Ethics</td>
</tr>
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</table>

**Social Work**

<table>
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<tr>
<th>Code</th>
<th>Course</th>
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<tbody>
<tr>
<td>SWK6308H</td>
<td>Designing and Implementing Quantitative Social Work Research</td>
</tr>
</tbody>
</table>
Biomedical Engineering (Collaborative Specialization)

Biomedical Engineering: Introduction

Lead Faculty of the Collaborative Specialization

Applied Science and Engineering

Participating Degree Programs

- Biochemistry — MSc, PhD
- Biomedical Engineering — MASc, PhD
- Chemical Engineering and Applied Chemistry — MASc, PhD
- Chemistry — MSc, PhD
- Dentistry — MSc, PhD
- Electrical and Computer Engineering — MASc, PhD
- Laboratory Medicine and Pathobiology — MSc, PhD
- Materials Science and Engineering — MASc, PhD
- Mechanical and Industrial Engineering — MASc, PhD
- Medical Biophysics — MSc, PhD
- Medical Science — MSc, PhD
- Pharmaceutical Sciences — MSc, PhD
- Physics — MSc, PhD
- Physiology — MSc, PhD
- Rehabilitation Science — MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Biomedical Engineering at the University of Toronto. This specialization offers the opportunity for research in biomedical engineering leading to master’s and doctoral degrees. The collaborative program is housed in the Institute of Biomedical Engineering (IBME).

Biomedical engineering is a multidisciplinary field that integrates engineering with biology and medicine. It uses methods, principles, and tools of engineering, physical sciences, and mathematics to solve problems in the medical and life sciences. Biomedical engineering consists of the application of the concepts and methods of engineering and physics to the study of living systems, to the enhancement and replacement of those systems, to the design and construction of systems to measure basic physiological parameters, to the development of instruments, materials, and techniques for biological and medical practice, and to the development of artificial organs. By its nature the field is interdisciplinary and involves close collaboration between many departments of the university and associated hospitals.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Biomedical Engineering” on their transcript.

Contact and Address

Web: ibbme.utoronto.ca/prospective-student/collaborative-specialization
Email: contact.bme@utoronto.ca
Telephone: (416) 978-4841
Fax: (416) 978-4317

Collaborative Specialization in Biomedical Engineering
Institute of Biomedical Engineering
University of Toronto
Rosebrugh Building, Room 407, 164 College Street
Toronto, Ontario M5S 3G9 Canada

Biomedical Engineering: Master’s Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must be graduates in dentistry, engineering, engineering science, medicine, or one of the physical or biological sciences and must be accepted to the Collaborative Specialization in Biomedical Engineering through one of the collaborating graduate units (home graduate units) listed above.

Specialization Requirements

Students register in the School of Graduate Studies through their home graduate unit; they will meet all respective degree requirements as described by SGS and the collaborative specialization committee. As part of these requirements:

- The program of study for each MASc or MSc degree student registered in the collaborative specialization must meet the requirements of the collaborating unit and will normally comprise at least 2.0 full-course equivalents (FCEs) and a thesis in the biomedical field.
  - Engineering and physical science students will be required to take a biological sciences course such as JPB1022H Human Physiology as Related to Biomedical Engineering (or an equivalent).
  - Biological science students will be expected to take a physical sciences course such as JPB1055H Bioengineering for Life Scientists (or an equivalent).
  - Students will be expected to take BME1477H Biomedical Engineering Project Design and Execution and pursue a thesis topic relevant to biomedical engineering.
- In addition to the 2.0 FCEs, students registered in a graduate degree program involving research are required to participate in two seminar courses: one of BME1010H or BME1011H Graduate Seminar Series (0.0 FCE) and JDE1000H Ethics in Research (0.0 FCE).
- Students are required to have a supervisory committee approved by the collaborative specialization committee and consisting of a supervisor from IBME, with a cross-
appointment in the home unit, and other members from other collaborating units as required.

- The examination committee will be constituted according to procedures in the home graduate unit and will include a member from that collaborating unit.

**Biomedical Engineering: Doctoral Level**

**Admission Requirements**

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must be graduates in dentistry, engineering, engineering science, medicine, or one of the physical or biological sciences and must be accepted to the Collaborative Specialization in Biomedical Engineering through one of the collaborating graduate units (home graduate units) listed above.
- Before PhD students are accepted, the collaborative specialization committee must be satisfied with the applicant's ability to undertake advanced graduate studies.

**Specialization Requirements**

- A **qualifying examination** may be required by the collaborating unit.
- Students admitted to the collaborative specialization who are admitted to a PhD program in their home unit will be subject to the requirements of the collaborating unit. The plan of study for each PhD student registered in the Collaborative Specialization in Biomedical Engineering must be approved by the collaborating unit and the collaborative specialization committee; the plan of study will normally comprise at least 1.0 full-course equivalent (FCE) and a thesis.
  - Engineering and physical science students will be required to take a biological sciences course such as JPB1022H Human Physiology as Related to Biomedical Engineering (or an equivalent).
  - Biological science students will be expected to take a physical sciences course such as JPB1055H Bioengineering for Life Scientists (or an equivalent).
  - Students will be expected to take BME1477H Biomedical Engineering Project Design and Execution and pursue a thesis topic relevant to biomedical engineering.
- In addition to the 1.0 FCE, students are required to participate in **two seminar courses**: one of BME1010H or BME1011H Graduate Seminar series (0.0 FCE), and JDE1000H Ethics in Research (0.0 FCE).
- Each PhD student is normally required to have a supervisory committee consisting of at least three persons, including a supervisor who has an appropriate graduate appointment and who is also a member of the graduate faculty in the home unit. When appropriate, an additional member of the supervisory committee may be from outside the University of Toronto, with approval from the School of Graduate Studies.

- For doctoral degrees, the examination committee will be constituted according to procedures in the home graduate unit and will include a member from that collaborating unit.

**Biomedical Engineering: Courses**

Not all courses are offered every year. Students should contact the BME office for details.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BME1010H</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>BME1011H</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>BME1405H</td>
<td>Clinical Engineering Instrumentation I</td>
</tr>
<tr>
<td>BME1436H</td>
<td>Clinical Engineering Surgery</td>
</tr>
<tr>
<td>BME1439H</td>
<td>Clinical Engineering Instrumentation II</td>
</tr>
<tr>
<td>BME1453H</td>
<td>Genomics and Synthetic Nucleic-Acid Technologies</td>
</tr>
<tr>
<td>BME1454H</td>
<td>Regenerative Medicine: Fundamentals and Applications</td>
</tr>
<tr>
<td>BME1457H</td>
<td>Biomedical Nanotechnology</td>
</tr>
<tr>
<td>BME1459H</td>
<td>Protein Engineering</td>
</tr>
<tr>
<td>BME1460H</td>
<td>Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging</td>
</tr>
<tr>
<td>BME1477H</td>
<td>Biomedical Engineering Project Design and Execution</td>
</tr>
<tr>
<td>BME1478H</td>
<td>Coding for Biomedical Engineers</td>
</tr>
<tr>
<td>BME1480H</td>
<td>Experimental Design and Multivariate Analysis in Bioengineering</td>
</tr>
<tr>
<td>BME4444Y</td>
<td>Practice in Clinical Engineering</td>
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<tr>
<td>CHE1107H</td>
<td>Applied Mathematics</td>
</tr>
<tr>
<td>CHE1141H</td>
<td>Advanced Chemical Reaction Engineering</td>
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<tr>
<td>CHE1143H</td>
<td>Transport Phenomena</td>
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<tr>
<td>CHE1310H</td>
<td>Chemical Properties of Polymers</td>
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<tr>
<td>DEN1070H</td>
<td>Advances in Dental Materials Science</td>
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<tr>
<td>DEN1081H</td>
<td>Bone Interfacing Implants</td>
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<tr>
<td>ECE1228H</td>
<td>Electromagnetic Theory</td>
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<tr>
<td>ECE1352H</td>
<td>Analog Circuit Design I</td>
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<tr>
<td>ECE1475H</td>
<td>Bio Photonics</td>
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<tr>
<td>ECE1502H</td>
<td>Information Theory</td>
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<tr>
<td>ECE1511H</td>
<td>Signal Processing</td>
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<tr>
<td>ECE1521H</td>
<td>Detection and Estimation Theory</td>
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<td>ECE1647H</td>
<td>Introduction to Nonlinear Control Systems</td>
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<tr>
<td>JCB1349H</td>
<td>Molecular Assemblies: Structure/Function/Properties</td>
</tr>
<tr>
<td>JEB1365H</td>
<td>Ultrasound: Theory and Applications in Biology and Medicine</td>
</tr>
<tr>
<td>JEB1433H</td>
<td>Medical Imaging</td>
</tr>
<tr>
<td>JEB1444H</td>
<td>Neural Engineering</td>
</tr>
<tr>
<td>JEB1447H</td>
<td>Sensory Communications</td>
</tr>
<tr>
<td>JMB1050H</td>
<td>Biological and Bio-inspired Materials</td>
</tr>
<tr>
<td>JNP1017H*</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
</tr>
<tr>
<td>JNP1018H*</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
</tr>
<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience: Cellular and Molecular — Lectures</td>
</tr>
<tr>
<td>JNS1000Y</td>
<td>Fundamentals of Neuroscience: Systems and Behaviour</td>
</tr>
<tr>
<td>JPB1022H</td>
<td>Human Physiology as Related to Engineering II</td>
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<tr>
<td>JPB1055H</td>
<td>Bioengineering for Life Scientists</td>
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<tr>
<td>JTC1135H</td>
<td>Applied Surface Chemistry</td>
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<td>JTC1331H</td>
<td>Biomaterials Science</td>
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<tr>
<td>MIE1001H</td>
<td>Advanced Dynamics</td>
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<td>MIE1101H</td>
<td>Advanced Classical Thermodynamics</td>
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<td>MIE1201H</td>
<td>Advanced Fluid Mechanics I</td>
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<td>MIE1452H</td>
<td>Signal Processing for Bioengineering</td>
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<td>MSE1026H</td>
<td>Analytical Electron Microscopy</td>
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<td>PHM1109H</td>
<td>Recent Developments in Dosage Form Design</td>
</tr>
<tr>
<td>PSL1432H</td>
<td>Theoretical Physiology</td>
</tr>
<tr>
<td>PSL1452H</td>
<td>Fundamentals of Ion Channel Function</td>
</tr>
<tr>
<td>REH1100H</td>
<td>Theory and Research in Rehabilitation Science</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Book History and Print Culture

Book History and Print Culture: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Art History — MA, PhD
Classics — MA, PhD
Comparative Literature — MA, PhD
East Asian Studies — MA, PhD
English — MA, PhD
French Language and Literature — MA, PhD
Germanic Languages and Literatures — MA
Germanic Literature, Culture and Theory — PhD
History — MA, PhD
History and Philosophy of Science and Technology — MA, PhD
Information — MI, PhD
Italian Studies — MA, PhD
Medieval Studies — MA, PhD
Museum Studies — MMSt
Music — MA, PhD
Religion — MA, PhD
Spanish — MA, PhD

Overview

_Histoire du livre_, History of the Book, Textual Studies, Print Culture, Sociology of the Text: all these names have been used to describe a growing international academic movement. The graduate programs listed above, in conjunction with Massey College, sponsor an interdisciplinary study in Book History and Print Culture (BHPC) in which the rich physical and human resources of the University of Toronto are brought to bear on multiple aspects of the creation, transmission, and reception of the written word. BHPC brings together graduate students from a variety of disciplines based on their common research interest in the physical, cultural, and theoretical aspects of the book. As a collaborative specialization, it is designed to augment the learning and research potential of existing master’s and doctoral programs by pooling the expertise of University of Toronto faculty members in this field from several disciplines.

Students register first for a master's or doctoral degree in their home graduate unit and then apply to the collaborative specialization. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Book History and Print Culture” on their transcript.

Contact and Address

Web: bhpctoronto.com
Email: book.history@utoronto.ca
Telephone: (416) 946-3560

Alan Galey, Director
Collaborative Specialization in Book History and Print Culture
University of Toronto
Massey College, 4 Devonshire Place
Toronto, Ontario M5S 2E1 Canada

Book History and Print Culture: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and one of the participating degree programs (home unit). Applicants to the collaborative specialization write to the director giving information about their background and relevant interests, identifying the degree and home unit for which they are applying, and outlining a proposed plan of study by April 10 for September admission. Applicants need not wait for a final decision from the home unit before applying to the collaborative specialization. Academic transcript(s) should be included in the application; unofficial transcripts are acceptable and may be sent either as scans attached to your email or as printouts from a student web service mailed to the BHPC office. Advice is available from the director and the collaborative specialization committee.

- Applications from the participating units have priority in admissions. If there is space in the collaborative specialization, students from other units may apply; they should consult the graduate coordinator in their home unit and the director of the BHPC specialization. Since course requirements vary from unit to unit, it is essential that there be close consultation between the collaborative specialization and the home unit at the time of the application.

Specialization Requirements

MA in Art History;
MA in Classics;
MA in East Asian Studies (Thesis Option);
MA in English (Creative Writing Field);
MA in French Language and Literature;
MA in Germanic Languages and Literatures;
MA in History;
MA in History and Philosophy of Science and Technology;
Master of Information (Thesis Option);
MA in Medieval Studies (Thesis Option);
Specialization Requirements

MA in Religion

• Students must fulfil the degree requirements of the unit in which they are enrolled.
• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• The thesis or exhibition project (MSL4000Y) in the participating degree program will be on a topic related to book history and print culture, approved by the collaborative specialization committee.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Elective courses will come from the BHPC roster of cross-listed courses, though students may substitute other courses with the director's approval. Students are encouraged to take courses outside their home graduate unit, if possible.

Specialization Requirements

MA in Music

• Students must fulfil the degree requirements of the unit in which they are enrolled.
• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 1.0 FCE in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

MA in Comparative Literature;
MA in East Asian Studies (Coursework-Only Option);
MA in English;
MA in Italian Studies;
MA in Medieval Studies (Coursework-Only Option);
MA in Spanish

Students must fulfil the degree requirements of the unit in which they are enrolled.

• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 0.5 FCE in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Master of Information (Coursework-Only Option)

• Students must fulfil the degree requirements of the unit in which they are enrolled.
• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 1.5 FCEs in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

• Students must fulfil the degree requirements of the unit in which they are enrolled.

Specialization Requirements

MA in Music

• Students must fulfil the degree requirements of the unit in which they are enrolled.
• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 1.0 FCE in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Elective courses will come from the BHPC roster of cross-listed courses, though students may substitute other courses with the director's approval. Students are encouraged to take courses outside their home graduate unit, if possible.

Specialization Requirements

MA in Comparative Literature;
MA in East Asian Studies (Coursework-Only Option);
MA in English;
MA in Italian Studies;
MA in Medieval Studies (Coursework-Only Option);
MA in Spanish

Students must fulfil the degree requirements of the unit in which they are enrolled.

• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 0.5 FCE in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Master of Information (Coursework-Only Option)

• Students must fulfil the degree requirements of the unit in which they are enrolled.
• BKS1001H *Introduction to Book History* (0.5 full-course equivalent [FCE]) and BKS1002H *Book History in Practice* (0.5 FCE), both of which should be taken in Year 1.
• At least 1.5 FCEs in additional elective courses related to book history and print culture.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.
The plan of study must also be approved by the BHPC specialization committee. The plan of study includes BKS1001H Introduction to Book History (if that course has not been taken previously at the master's level), BKS2000H Advanced Seminar in Book History and Print Culture, and BKS2001H Individual Practicum in Book History and Print Culture. BKS1001H must be taken as a prerequisite or co-requisite to BKS2000H and BKS2001H.

The dissertation topic will be in the area of book history and print culture. The advisory committee will include at least one faculty member affiliated with BHPC, and students are encouraged, but not required, to seek representation on the committee from outside the home unit.

The collaborative specialization may be completed on a flexible-time basis only by Faculty of Information students registered for the Information flexible-time PhD.

### Book History and Print Culture: Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKS1001H</td>
<td>Introduction to Book History</td>
</tr>
<tr>
<td>BKS1002H</td>
<td>Book History in Practice</td>
</tr>
<tr>
<td>BKS2000H</td>
<td>Advanced Seminar in Book History and Print Culture</td>
</tr>
<tr>
<td>BKS2001H</td>
<td>Individual Practicum in Book History and Print Culture</td>
</tr>
</tbody>
</table>

Get further details and listings of appropriate courses in various graduate units.
Cardiovascular Sciences

Cardiovascular Sciences: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Biomedical Engineering — MASc, PhD
Chemical Engineering and Applied Chemistry — MASc, PhD
Clinical Engineering — MHSc
Dentistry — MSc, PhD
Kinesiology — MSc, PhD
Laboratory Medicine and Pathobiology — MSc, PhD
Medical Biophysics — MSc, PhD
Medical Science — MSc, PhD
Pharmaceutical Sciences — MSc, PhD
Pharmacology — MSc, PhD
Physiology — MSc, PhD
Rehabilitation Science — MSc, PhD

Overview

The graduate programs listed above, together with the clinical departments of Anesthesia, Medical Imaging, Medicine, and Surgery, participate in the graduate Cardiovascular Sciences Collaborative Specialization at the University of Toronto. Units participating in the collaborative specialization contribute graduate courses and provide facilities and supervision for graduate research. Applicants must first be accepted by one of the participating graduate units and then complete a separate application to register in the collaborative specialization.

Students follow a plan of study acceptable to both the participating unit and the Cardiovascular Sciences specialization. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Cardiovascular Sciences" on their transcript.

Contact and Address

Web: www.cscp.utoronto.ca
Email: cv.program@utoronto.ca
Telephone: (416) 978-0746

Cardiovascular Sciences Collaborative Specialization
University of Toronto
Room 413, 4th Floor, 263 McCaul Street
Toronto, Ontario M5T 1W7
Canada

Cardiovascular Sciences: Master's Level

Admission Requirements

- Normally, an A– average in previous coursework (publications and research work may be considered for mature students).
- The student has already been accepted into a home graduate unit that participates in the Cardiovascular Sciences Collaborative Specialization.
- Acceptance by a supervisor who is a faculty member of the Cardiovascular Sciences Collaborative Specialization.
- Research area falls within the mandate of the Cardiovascular Sciences Collaborative Specialization.

Specialization Requirements

- Students must meet the requirements of their home graduate unit in terms of coursework and thesis work.
- Write a thesis under the supervision of a faculty member of the collaborative specialization. The thesis topic will be in the area of cardiovascular sciences. An electronic copy of the accepted thesis in final form must be submitted to the Cardiovascular Sciences Collaborative Specialization.
- Complete 0.5 full-course equivalent (FCE) in an approved cardiovascular course listed under the approved Course List.
- Students must attend the annual Student Research Day each year they are in this collaborative specialization, and make one presentation during training. The presentation must demonstrate excellence in cardiovascular research.

Cardiovascular Sciences: Doctoral Level

Admission Requirements

- Normally, an A– average in previous coursework (publications and research work may be considered for mature students).
- The student has already been accepted into a home graduate unit that participates in the Cardiovascular Sciences Collaborative Specialization.
- Acceptance by a supervisor who is a faculty member of the Cardiovascular Sciences Collaborative Specialization.
- Research area falls within the mandate of the Cardiovascular Sciences Collaborative Specialization.

Specialization Requirements

- Students must meet the requirements of their home graduate unit in terms of coursework and thesis work.
- Write a thesis under the supervision of a faculty member of the collaborative specialization. The thesis topic will be in the area of cardiovascular sciences. An electronic copy of the accepted thesis in final form must be submitted to the Cardiovascular Sciences Collaborative Specialization.
• Complete two half courses or 1.0 full-course equivalent (FCE) chosen from among the following seven courses: JCV1060H, JCV3060H, JCV3061H, JCV3062H, JCV3063H, JCV3064H, and JCV3065H.

• Students must attend the annual Student Research Day each year they are in this collaborative specialization, and make one presentation during training. The presentation must demonstrate excellence in cardiovascular research.

Cardiovascular Sciences: Courses

Cardiovascular sciences courses offered by the participating units are listed below. Not all courses are offered each year. For course details, consult the Cardiovascular Sciences website.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JCV1060H</td>
<td>Developmental Cardiovascular Physiology</td>
</tr>
<tr>
<td>JCV3060H</td>
<td>Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction</td>
</tr>
<tr>
<td>JCV3061H</td>
<td>Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System</td>
</tr>
<tr>
<td>JCV3062H</td>
<td>Advanced Topics in Cardiovascular Sciences — Heart Function</td>
</tr>
<tr>
<td>JCV3063H</td>
<td>Advanced Topics in Cardiovascular Sciences — Vascular</td>
</tr>
<tr>
<td>JCV3064H</td>
<td>Advanced Topics in Cardiovascular Sciences — Microvascular Medicine</td>
</tr>
<tr>
<td>JCV3065H</td>
<td>Advanced Topics in Cardiovascular Sciences — Systems Biology</td>
</tr>
<tr>
<td>JTC1331H</td>
<td>Biomaterials Science</td>
</tr>
<tr>
<td>KIN5508H</td>
<td>Cardiovascular Disease and Exercise</td>
</tr>
<tr>
<td>LMP1104H</td>
<td>Current Understanding of Ischemic Heart Disease</td>
</tr>
<tr>
<td>LMP1105H</td>
<td>Current Understanding of Atherosclerosis</td>
</tr>
<tr>
<td>LMP1104H</td>
<td>Current Understanding of Atherosclerosis (0.25 FCE)</td>
</tr>
<tr>
<td>PSL1462H</td>
<td>Molecular Aspects of Cardiac Function</td>
</tr>
</tbody>
</table>
Community Development

Community Development: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

- Adult Education and Community Development — MA, MEd
- Counselling and Clinical Psychology (Clinical and Counselling Psychology field) — MA
- Counselling Psychology — MEd
- Geography — MA
- Planning — MScPl
- Public Health Sciences — MPH
- Social Work — MSW

Overview

The Collaborative Specialization in Community Development provides students with a multidisciplinary graduate education in community development. Community development involves working with community members and groups to effect positive change in the social, economic, organizational, or physical structures of a community that improve both the welfare of community members and the community’s ability to direct its future.

Students must first apply to and register in one of the participating master's degree programs listed above, and then apply to the collaborative specialization. Students must follow a course of study acceptable to both the home unit and the collaborative specialization. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Community Development” on their transcript.

Contact and Address

Web: www.dlsph.utoronto.ca/program/collaborative-specialization-in-community-development-cdcp
Email: blake.poland@utoronto.ca
Telephone: (416) 978-7542

Collaborative Specialization in Community Development
Dalla Lana School of Public Health
University of Toronto
155 College Street, 6th Floor
Toronto, Ontario M5T 3M7
Canada

Community Development: Master's Level

Admission Requirements

- Collaborative specializations are administered under the auspices of the School of Graduate Studies.
- Applicants must be accepted for admission to a participating graduate unit and comply with the admission procedures of that unit before applying to the Collaborative Specialization in Community Development.
- Applicants must submit the following to the collaborative specialization committee:
  - A copy of the letter accepting you into one of the participating graduate units.
  - A resumé or curriculum vitae (CV).
  - A letter explaining how your plan of study, your specific interests, and your career goals relate to community development (i.e., why you want to enrol in the Collaborative Specialization in Community Development); maximum length: 500 words. Include reference to any relevant experience (volunteer, work, education, etc.).

Specialization Requirements

- Students must register in the master's degree program through one of the participating home graduate units. They must meet all respective degree requirements of the School of Graduate Studies and their participating home graduate unit.
- To fulfil the requirements of the Collaborative Specialization in Community Development, students must complete the following:
  - The core course UCS1000H Community Development.
  - An additional 1.0 full-course equivalent (FCE) in the subject area of the collaborative specialization, to be approved by the collaborative specialization director, of which at least 0.5 FCE must be external to the student's home graduate unit.
  - Participation in a non-credit coordinating seminar on community development.
  - Where required by the home degree program, a thesis or the major research paper (as designated by the home degree program) on a topic related to community development; a member of the thesis committee or the reader of the major research paper must be a faculty member associated with the collaborative specialization. Or where required by the home degree program, a practicum placement with community development content as approved by the collaborative specialization director or core faculty member from that home degree program.
- Normally, the required courses listed below are taken as options within regular departmental or faculty degree requirements, not as additional courses.
Community Development: Courses

Core Course

In addition to the core course (UCS1000H), students must take an additional 1.0 FCE in the subject area of the collaborative specialization, to be approved by the collaborative specialization director. The following is a list of the currently approved courses; the list is reviewed annually and posted on the Community Development website.

### Adult Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHA1102H</td>
<td>Community Development: Innovative Models</td>
</tr>
<tr>
<td>LHA1104H</td>
<td>Social Action Education: Community Development, Social Services, and Social Movements</td>
</tr>
<tr>
<td>LHA1182H</td>
<td>Nonprofits, Co-operatives, and the Social Economy: An Overview</td>
</tr>
<tr>
<td>LHA1190H</td>
<td>Community Healing and Peacebuilding</td>
</tr>
<tr>
<td>LHA1194H</td>
<td>Cyberliteracy and Adult Education</td>
</tr>
<tr>
<td>LHA1196H</td>
<td>Walking Together, Talking Together: The Praxis of Reconciliation</td>
</tr>
<tr>
<td>LHA5100H</td>
<td>Special Topics in Adult Education and Community Development: Master's Level (with approval of the Director)</td>
</tr>
<tr>
<td>LHA6100H</td>
<td>Special Topics in Adult Education and Community Development: Doctoral Level (with approval of the Director)</td>
</tr>
</tbody>
</table>

### Public Health Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5126H</td>
<td>Building Community Resilience</td>
</tr>
<tr>
<td>CHL7001H</td>
<td>Directed Reading</td>
</tr>
</tbody>
</table>

### Social Work

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK4210H</td>
<td>Promoting Empowerment: Working at the Margins</td>
</tr>
<tr>
<td>SWK4304H</td>
<td>Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally</td>
</tr>
<tr>
<td>SWK4306H</td>
<td>Theoretical Approaches to Defining Social Injustice and Engaging in Social Change</td>
</tr>
<tr>
<td>SWK4422H</td>
<td>Social Housing and Homelessness</td>
</tr>
<tr>
<td>SWK4512H</td>
<td>Research Knowledge for Social Justice</td>
</tr>
</tbody>
</table>

### Counselling Psychology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APD1290H</td>
<td>Indigenous Healing in Counselling and Psychoeducation</td>
</tr>
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</table>

### Nursing

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NUR1047Y</td>
<td>Community Participation and Health</td>
</tr>
<tr>
<td>NUR1083H</td>
<td>Comparative Politics of Health Policy in a Globalizing World</td>
</tr>
</tbody>
</table>

### Planning

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JPG1507H</td>
<td>Housing Markets and Housing Policy Analysis</td>
</tr>
<tr>
<td>JPG1512H</td>
<td>Place, Politics, and the Urban</td>
</tr>
<tr>
<td>JPG1518H</td>
<td>Sustainability and Urban Communities</td>
</tr>
<tr>
<td>JPG1615H</td>
<td>Planning the Social Economy</td>
</tr>
</tbody>
</table>
Comparative, International and Development Education

Comparative, International and Development Education: Introduction

Lead Faculty of the Collaborative Specialization

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Curriculum and Pedagogy — MA, MEd, PhD
Educational Leadership and Policy — MA, MEd, EdD, PhD
Higher Education — MA, MEd, EdD, PhD
Language and Literacies Education — MA, MEd, PhD
Social Justice Education — MA, MEd, EdD, PhD

Overview

Comparative, International and Development Education (CIDE) is one of the world’s largest, most diverse and dynamic graduate specializations in the field of comparative education. Research interests span an exciting range of theoretical and practical issues, from the study of ethnicity and identity to the issues of globalization and global governance, from non-formal learning and citizenship education to concrete problems of educational reform, social equality, language education, conflict resolution, and community development. These issues are approached from a range of theoretical and disciplinary frames including: economic, political, sociological, historical, and philosophical approaches taught alongside vibrant interpretations of feminist, critical, post-structuralist, and cultural theories.

The broad and diverse scope of the CIDE graduate specialization will appeal to both Canadian and international students interested in applying a comparative and international lens in their professional and scholarly work at home or abroad.

CIDE students can take courses in multiple fields within education, political science, feminist studies, sociology, and geography. The CIDE collaborative specialization is linked with events and programming at the Munk School of Global Affairs and Public Policy at the University of Toronto.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students receive the notation "Completed Collaborative Specialization in Comparative, International and Development Education" on their transcript and parchment.

Contact and Address

Web: www.oise.utoronto.ca/cidec
Email: cidec.oise@utoronto.ca
Telephone: (416) 978-0892
Fax: (416) 926-4749

Collaborative Specialization in Comparative, International and Development Education
Comparative, International and Development Education Centre (CIDE)
Ontario Institute for Studies in Education, University of Toronto
252 Bloor Street West, 7th Floor
Toronto, Ontario M5S 1V6
Canada

Comparative, International and Development Education: Master’s Level

Admission Requirements

• Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants should apply to the appropriate degree program in one (or more) of the collaborating graduate units that corresponds most closely to their general background and interests.

• Applicants to the CIDE collaborative specialization are normally expected to have had at least one year of international or cross-cultural experience (includes Indigenous nation settings).

• Applicants who have questions concerning their eligibility should contact the CIDEc administrator at cidec.oise@utoronto.ca.

• Prospective applicants should review the detailed information about the CIDE collaborative specialization at www.oise.utoronto.ca/cidec.

Specialization Requirements

• Individual student programs of study must meet the requirements of both the home graduate unit and the collaborative specialization. Normally, a careful selection of cross-listed courses will satisfy this requirement without any additional course load.

• Course requirements are as follows:
  o 0.5 full-course equivalent (FCE) required introduction: CIE1001H Introduction to Comparative, International and Development Education. CIE1001H must be taken in Year 1 of the full-time student’s academic course load, or within the first four courses of the part-time and flexible-time student’s academic work.
  o 0.5 core FCE CIDE graduate course.
  o 1.0 FCE (equivalent to two half courses) other core CIDE or elective graduate courses. CIDE courses must be taught by CIDE affiliated graduate faculty members.

• Regular participation in and attendance at the CIDE Seminar Series. Participation at a minimum of five seminars is required; some may be attended live online.
Students who write a thesis or major research paper as part of their program are also required to make at least one presentation to the CIDE community related to their research/development work.

In master's programs requiring a major research paper or a thesis, the topic must relate to and demonstrate master's-level understanding of the research/theory base of CIDE. Participating CIDE faculty and the home graduate unit must be represented on the thesis committee.

Comparative, International and Development Education: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants should apply to the appropriate degree program in one (or more) of the collaborating graduate units that corresponds most closely to their general background and interests.
- Applicants to the CIDE collaborative specialization are normally expected to have had at least one year of international or cross-cultural experience (includes Indigenous nation settings).
- Applicants who have questions concerning their eligibility should contact the CIDE administrator at cidec.oise@utoronto.ca.
- Prospective applicants should review the detailed information about the CIDE collaborative specialization at www.oise.utoronto.ca/cidec. They are strongly advised to contact one of the participating CIDE faculty members in their home graduate unit to discuss their research interests and goals.

Specialization Requirements

- Individual student programs of study must meet the requirements of both the home graduate unit and the collaborative specialization. Normally, a careful selection of cross-listed courses will satisfy this requirement without any additional course load.
- Course requirements are as follows:
  - 0.5 full-course equivalent (FCE) required introduction: CIE1001H Introduction to Comparative, International and Development Education, if not already taken, or equivalent if transferring from another university. CIE1001H must be taken in Year 1 of the full-time student's academic course load, or within the first four courses of the part-time and flexible-time student's academic work. Students who have completed CIE1001H at the master's level must select (in lieu, in addition to the requirements below) a 0.5 FCE course from the list of core courses, with approval from the CIDE Specialization Director at the time of course selection.
  - 0.5 FCE core CIDE graduate (preferably doctoral-level) course.
  - 1.0 FCE (equivalent to two half courses) additional core CIDE or elective graduate (preferably doctoral-level) courses. CIDE courses must be taught by CIDE affiliated graduate faculty members.
- Regular participation in and contribution to the CIDE Seminar Series (at least one major presentation to the seminar group related to the student's thesis research/development work in addition to regular participation). Participation at a minimum of five seminars is required; some may be attended live online.
- Completion of a thesis that contributes to the research/theory base of CIDE. Participating CIDE faculty and the home graduate unit must be represented on the thesis committee.

Comparative, International and Development Education: Courses

Not all courses are offered each year. Visit the Comparative, International, and Development Education (CIDE) website for current course offerings, including special topics courses that do not appear in the list below.

In addition to the courses listed here, a defined list of special topics courses, taught by CIDE participating faculty members in any of the participating graduate departments, can be taken to meet core or elective graduate course requirements for CIDE.

Core Courses

Comparative Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>CIE1001H</td>
<td>Introduction to Comparative, International, and Development Education</td>
</tr>
<tr>
<td>CIE1002H</td>
<td>Practicum for Comparative, International, and Development Education</td>
</tr>
<tr>
<td>CIE1006H</td>
<td>Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization</td>
</tr>
<tr>
<td>CIE6000H</td>
<td>Special Topics in Comparative, International, and Development Education</td>
</tr>
</tbody>
</table>

Curriculum, Teaching and Learning

Curriculum and Pedagogy Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CTL103TH</td>
<td>Teacher Development: Comparative and Cross-Cultural Perspectives</td>
</tr>
<tr>
<td>CTL1060H</td>
<td>Education and Social Development</td>
</tr>
<tr>
<td>CTL1312H</td>
<td>Democratic Citizenship Education</td>
</tr>
<tr>
<td>CTL1319H</td>
<td>Religious Education: Comparative and International Perspectives</td>
</tr>
<tr>
<td>CTL1330H</td>
<td>Education and Peacebuilding in Conflict Zones: International Comparative Perspectives</td>
</tr>
</tbody>
</table>
Leadership, Higher and Adult Education

Adult Education and Community Development Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>LHA1146H</td>
<td>Women, War, and Learning</td>
</tr>
<tr>
<td>LHA3064H</td>
<td>Global Governance and Educational Change: the Politics of International Cooperation in Education</td>
</tr>
<tr>
<td>LHA3104H</td>
<td>Adult Education, Marxism, and Feminism</td>
</tr>
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Educational Leadership and Policy Program

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>LHA1065H</td>
<td>Educational Equity and Excellence in International Comparison</td>
</tr>
<tr>
<td>LHA1066H</td>
<td>Comparative and International Perspectives on Gender and Education Policy and Practice</td>
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Higher Education Program

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>LHA1806H</td>
<td>Systems of Higher Education</td>
</tr>
<tr>
<td>LHA1807H</td>
<td>System-Wide Planning and Policy for Higher Education</td>
</tr>
<tr>
<td>LHA1825H</td>
<td>Comparative Education Theory and Methodology (RM)</td>
</tr>
<tr>
<td>LHA1826H</td>
<td>Comparative Higher Education</td>
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<tr>
<td>LHA1846H</td>
<td>Internationalization of Higher Education in a Comparative Perspective</td>
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<tr>
<td>LHA3810H</td>
<td>International Academic Relations</td>
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Social Justice Education

<table>
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<tbody>
<tr>
<td>SJE1924H</td>
<td>Modernization, Development, and Education in African Contexts</td>
</tr>
<tr>
<td>SJE1927H</td>
<td>Migration and Globalization</td>
</tr>
<tr>
<td>SJE1976H</td>
<td>Critical Media Literacy Education</td>
</tr>
<tr>
<td>SJE3911H</td>
<td>Cultural Knowledges, Representation, and Colonial Education</td>
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</table>

Elective Courses

Curriculum, Teaching and Learning

Curriculum and Pedagogy Program

<table>
<thead>
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<tbody>
<tr>
<td>CTL1031H</td>
<td>Language, Culture, and Identity: Using the Literary Text in Teacher Development</td>
</tr>
<tr>
<td>CTL1063H</td>
<td>Pedagogies of Solidarity</td>
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Leadership, Higher and Adult Education

Adult Education and Community Development Program

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<tr>
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<tbody>
<tr>
<td>LHA1102H</td>
<td>Community Development: Innovative Models</td>
</tr>
<tr>
<td>LHA1113H</td>
<td>Gender and Race at Work</td>
</tr>
<tr>
<td>LHA1115H</td>
<td>Learning for the Global Economy</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>LHA1142H</td>
<td>Young Adulthood in Crisis: Learning, Transitions, and Activism</td>
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<td>LHA1145H</td>
<td>Participatory Research in the Community and the Workplace (RM)</td>
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<tr>
<td>LHA1147H</td>
<td>Women, Migration, and Work</td>
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<tr>
<td>LHA1180H</td>
<td>Indigenous Worldviews: Implications for Education</td>
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<tr>
<td>LHA1181H</td>
<td>Embodied Learning and Alternative Approaches to Community Wellness</td>
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<tr>
<td>LHA1184H</td>
<td>Aboriginal Knowledge: Implications for Education</td>
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<tr>
<td>LHA1190H</td>
<td>Community Healing and Peacebuilding</td>
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<tr>
<td>LHA1196H</td>
<td>Walking Together, Talking Together: The Praxis of Reconciliation</td>
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<tr>
<td>LHA3140H</td>
<td>Decolonization and Transformative Education</td>
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**Educational Leadership and Policy Program**

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<tr>
<td>LHA1029H</td>
<td>Special Applications of the Administrative Process</td>
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<tr>
<td>LHA1041H</td>
<td>Educational Administration I: Social and Policy Context of Schooling</td>
</tr>
<tr>
<td>LHA3041H</td>
<td>Administrative Theory and Educational Problems I: Doctoral Seminar on Policy Issues in Education</td>
</tr>
<tr>
<td>LHA3055H</td>
<td>Democratic Values, Student Engagement, and Democratic Leadership</td>
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**Higher Education Program**

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<th>Course Code</th>
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<tbody>
<tr>
<td>LHA1803H</td>
<td>Recurring Issues in Postsecondary Education</td>
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**Social Justice Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SJE1912H</td>
<td>Foucault and Research in Education and Culture: Discourse, Power, and the Subject</td>
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<tr>
<td>SJE1921Y</td>
<td>The Principles of Anti-Racism Education</td>
</tr>
<tr>
<td>SJE1922H</td>
<td>Sociology of Race and Ethnicity</td>
</tr>
<tr>
<td>SJE1925H</td>
<td>Indigenous Knowledge and Decolonization: Pedagogical Implications</td>
</tr>
<tr>
<td>SJE1926H</td>
<td>Race, Space, and Citizenship: Research Methods</td>
</tr>
<tr>
<td>SJE1951H</td>
<td>The School and the Community</td>
</tr>
<tr>
<td>SJE1956H</td>
<td>Social Relations of Cultural Production in Education</td>
</tr>
<tr>
<td>SJE2941H</td>
<td>Bourdieu: Theory of Practice in Social Sciences</td>
</tr>
<tr>
<td>SJE3905H</td>
<td>Interdisciplinary Approaches to Research: Theory and Praxis</td>
</tr>
</tbody>
</table>
Contemporary East and Southeast Asian Studies

Contemporary East and Southeast Asian Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

- Anthropology — MA
- East Asian Studies — MA
- Geography — MA
- Global Affairs — MGA
- History — MA
- Management — MBA
- Planning — MScPI
- Political Science — MA
- Public Policy — MPP
- Social Work — MSW
- Sociology — MA
- Women and Gender Studies — MA

Overview

The Collaborative Master's Specialization in Contemporary East and Southeast Asian Studies (CESEAS) is designed to provide graduates with advanced training in a particular discipline and in the historical and social science studies of modern East and Southeast Asia. The major topics of emphasis are political economy, modern and contemporary social history, international relations, gender, political and social change, economic development, and cultural studies. The collaborative specialization contributes to the development of an integrated and interdisciplinary research community in Contemporary East and Southeast Asian Studies at the University.

The graduate programs listed above participate in the Collaborative Specialization in CESEAS at the University of Toronto. The collaborating units contribute courses and provide facilities and supervision for master's-level research. This specialization is administered by a committee chaired by a director.

Applicants are expected to meet the admission and degree requirements of both their home unit and the collaborative specialization in Contemporary East and Southeast Asian Studies. The specialization requirements can be met concurrently with, or in addition to, home unit requirements. Upon successful completion of the master's degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Contemporary East and Southeast Asian Studies" on their transcript.

Contact and Address

Web: munkschool.utoronto.ca/ai-maps
Email: asiapacific.ma@utoronto.ca
Telephone: (416) 946-8832
Fax: (416) 946-8838

Collaborative Master's Specialization in Contemporary East and Southeast Asian Studies

Asian Institute, Munk School of Global Affairs and Public Policy
University of Toronto
1 Devonshire Place, Room 228N
Toronto, Ontario M5S 3K7
Canada

Contemporary East and Southeast Asian Studies: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- To be considered for admission to the collaborative specialization in Contemporary East and Southeast Asian Studies, applicants are expected to have completed coursework on Asia or have had relevant working or living experience in East or Southeast Asia.

Specialization Requirements

- Students must satisfy the degree requirements of both the home graduate unit and the collaborative specialization. This can be done concurrently with, or in addition to, home unit requirements.
- Attend the year-long, interdisciplinary core seminar ASI1000Y Issues in Asia-Pacific Studies (1.0 full-course equivalent [FCE]). Topics vary from year to year.
- Complete 0.5 elective FCE on East or Southeast Asia, or in Asia-related courses within the home graduate unit or any other units (subject to approval from the collaborative specialization director).
- Complete a Major Research Paper, usually written in the context of a 0.5 FCE independent study course (for example, ASI1001H Independent Research in Asia-Pacific Studies). The Major Research Paper must address a topic on contemporary East and Southeast Asian Studies, and be based on original and in-depth research that goes beyond a normal seminar paper at the graduate level. The length is approximately 50 to 60 pages, although certain types of research might well be communicated in formats of shorter length. The Major Research Paper requirement can be met in the home graduate unit for a major's thesis in a home unit, the additional Major Research Paper will be waived. Students must seek approval for topics and format from the collaborative specialization director.
By the time of graduation from the master's degree program, every student is strongly encouraged to have a working knowledge of an East or Southeast Asian language as needed for his or her course of study.

Contemporary East and Southeast Asian Studies: Courses

Course List

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASI1001H</td>
<td>Independent Research in Contemporary East and Southeast Asian Studies</td>
</tr>
<tr>
<td>ASI1000Y</td>
<td>Issues in Contemporary East and Southeast Asian Studies</td>
</tr>
<tr>
<td>ASI4140H</td>
<td>The Public Event in Asia</td>
</tr>
<tr>
<td>ASI4200H</td>
<td>Asia and the New Global Economy</td>
</tr>
<tr>
<td>ASI4300H</td>
<td>Nationalism and Revolution in Asia</td>
</tr>
<tr>
<td>ASI4900H</td>
<td>Special Topics in Contemporary Asian Studies</td>
</tr>
</tbody>
</table>

Please consult the website for courses offered by participating graduate units.
Development Policy and Power

Development Policy and Power: Introduction

Lead Faculty of the Collaborative Specialization

University of Toronto Scarborough

Participating Degree Programs

Anthropology — MA, MSc
Environmental Science — MEnvSc
Geography — MA
Political Science — MA
Public Health Sciences — MPH
Sociology — MA
Social Justice Education — MA, MEd
Women and Gender Studies — MA

Supporting Unit

Centre for Critical Development Studies

Overview

The Collaborative Specialization in Development Policy and Power is designed to provide master's students with a critical and historicized understanding of the nature of some of the main policy debates within the field of international development. These include: power dynamics and their shifts over time within particular development policy domains at the global, national, and local levels of analysis; the role of the power struggles around development policy making in the processes of program design and implementation; and the ways in which these power struggles shape the institutionalization of policies that are equitable and social justice oriented.

In addition to examining contestations around the development field's major historical and theoretical threads, students will be immersed in thematic discussions around development policy fields such as: trade, financialization, and illicit financial flows; agriculture and land struggles; political ecology and extra-activism; the politics of sustainability and environmental survival; health governance and health inequities; displacement, immigration, and citizenship; foreign aid and South-South cooperation; indigenous, racial justice, and gender equity struggles; political economy of knowledge production; commodity booms, poverty reduction, and the exercise of state power; and neoliberal globalization and corporate power, and associated resistance and popular mobilization, writ large.

The graduate programs listed above participate in the Collaborative Specialization in Development Policy and Power at the University of Toronto. The collaborating graduate units contribute courses and provide facilities, support, and supervision for master's-level research and practicum placements.

Upon successful completion of the master's degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Development Policy and Power” on their transcript.

Contact and Address

Centre for Critical Development Studies:
www.utsc.utoronto.ca/ccds
Development Policy and Power:
ccdscsutoronto.wixsite.com/ccds
Email: ccds-ce-ma@utsc.utoronto.ca
Telephone: (416) 287-7214

Collaborative Specialization in Development Policy and Power
Centre for Critical Development Studies
University of Toronto Scarborough
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Development Policy and Power: Master's Level

Admission Requirements

Applicants must:

• Meet the admission requirements of both the home graduate unit and the collaborative specialization.
• Be enrolled in, or applying to, a participating master's degree program.
• Submit a copy of the CV and reference letters submitted at the time of applying to their home graduate unit.
• Submit a one-page essay describing why and how their interests coincide with the Collaborative Specialization in Development Policy and Power.

Optional Preparation

• The Centre for Critical Development Studies will provide students interested in the collaborative specialization with a list of key background readings. Students with no critical development studies exposure through their undergraduate studies, a placement or internship, or relevant work experience are strongly encouraged to review all the material identified in the list. Students with a critical development background are encouraged to review the texts they have not been exposed to.
Specialization Requirements

MA and MSc in Anthropology; MA in Geography; MA in Political Science (Fields: Political Economy of International Development; Political Science); Master of Public Health (Field: Health Promotion); Social Justice Education (MA; MEd Coursework Plus Major Research Paper Option; MEd Coursework Plus Thesis Option); MA in Sociology (Research Paper Option); MA in Women and Gender Studies

- Students must meet all the respective degree requirements of the School of Graduate Studies and the participating graduate unit.
- Students must meet the requirements of the collaborative specialization as follows:
  - IDS1000H (0.5 full-course equivalent [FCE]): a core course meeting every other week throughout the academic year involving a mix of classes covering a substantive theme.
  - Participate regularly and actively in the Development Policy and Power Seminar Series SRM3333H.
  - 0.5 elective FCE related to development policy and power.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Sociology (Coursework Only Option)

- Students must meet all the respective degree requirements of the School of Graduate Studies and the participating graduate unit.
- Students must meet the requirements of the collaborative specialization as follows:
  - IDS1000H (0.5 full-course equivalent [FCE]): a core course meeting every other week throughout the academic year involving a mix of classes covering a substantive theme.
  - Participate regularly and actively in the Development Policy and Power Seminar Series SRM3333H.
  - 0.5 elective FCE related to development policy and power.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Master of Environmental Science (Research Paper Option)

- Students must meet all the respective degree requirements of the School of Graduate Studies and the participating graduate unit.
- Students must meet the requirements of the collaborative specialization as follows:
  - IDS1000H (0.5 full-course equivalent [FCE]): a core course meeting every other week throughout the academic year involving a mix of classes covering a substantive theme. This course must be taken in addition to the 5.5 FCEs required for the MEnvSc program.
  - Participate regularly and actively in the Development Policy and Power Seminar Series SRM3333H.
  - The major research paper in the participating degree program will be on a topic in critical development studies, approved by the collaborative specialization committee.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Master of Environmental Science (Internship Option)

- Students must meet all the respective degree requirements of the School of Graduate Studies and the participating graduate unit.
- Students must meet the requirements of the collaborative specialization as follows:

Specialization Requirements

Social Justice Education (MEd Coursework Only Option)

- Students must meet all the respective degree requirements of the School of Graduate Studies and the participating graduate unit.
- Students must meet the requirements of the collaborative specialization as follows:
  - IDS1000H (0.5 full-course equivalent [FCE]): a core course meeting every other week throughout the academic year involving a mix of classes covering a substantive theme.
  - Participate regularly and actively in the Development Policy and Power Seminar Series SRM3333H.
  - 1.0 elective FCE related to development policy and power.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.
IDS1000H (0.5 full-course equivalent [FCE]): a core course meeting every other week throughout the academic year involving a mix of classes covering a substantive theme. This course must be taken in addition to the 5.5 FCEs required for the MEnvSc program.

- Participate regularly and actively in the Development Policy and Power Seminar Series SRM3333H.
- 1.5 elective FCEs from the following: EES1122H, EES1134H, EES1135H, EES3002H.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

### Development Policy and Power: Courses

#### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>IDS1000H</td>
<td>Development Policy and Power</td>
</tr>
<tr>
<td>SRM3333H</td>
<td>Master's Seminar Series</td>
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</table>

#### Elective Courses by Graduate Unit

These courses may have prerequisites and enrolment limits and may not be offered every year. Students may take courses not listed here with approval of the collaboration specialization director.

**Anthropology**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ANT6019H</td>
<td>Anthropology of Neoliberalism</td>
</tr>
<tr>
<td>ANT7002H</td>
<td>Medical Anthropology II</td>
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**Comparative, International and Development Education**

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<th>Course Title</th>
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<tr>
<td>CIE1001H</td>
<td>Introduction to Comparative, International, and Development Education</td>
</tr>
<tr>
<td>CIE1006H</td>
<td>Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization</td>
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**Curriculum, Teaching and Learning**

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<td>CTL1060H</td>
<td>Education and Social Development</td>
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**Geography and Planning**

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<tr>
<td>GGR1807H</td>
<td>Special Topics: Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'</td>
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<tr>
<td>JPG1426H</td>
<td>Natural Resources, Difference, and Conflict</td>
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<th>Course Code</th>
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<tbody>
<tr>
<td>POL1205H</td>
<td>Topics in International Politics I</td>
</tr>
<tr>
<td>POL12212H</td>
<td>Human Rights, Politics, and International Relations</td>
</tr>
<tr>
<td>POL1226H</td>
<td>Ethics and International Relations</td>
</tr>
<tr>
<td>POL12322H</td>
<td>Topics in Comparative Politics II</td>
</tr>
<tr>
<td>POL12345H</td>
<td>Politics of Growth in Developing Countries</td>
</tr>
<tr>
<td>POL12351H</td>
<td>Contentious Politics and Social Movements</td>
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<tr>
<td>POL12361H</td>
<td>Globalization and Indigenous Politics</td>
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<tr>
<td>POL12391H</td>
<td>Topics in International Politics III</td>
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<tr>
<td>POL12392H</td>
<td>Topics in International Politics IV</td>
</tr>
<tr>
<td>POL12405H</td>
<td>Topics in Latin American Politics</td>
</tr>
<tr>
<td>POL12408H</td>
<td>Political Economy of International Development</td>
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<td>POL12418H</td>
<td>Topics in Middle East Politics</td>
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**Political Science**

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<tr>
<td>CHL5113H</td>
<td>Global Migration and Health</td>
</tr>
<tr>
<td>CHL5702H</td>
<td>History of International Health</td>
</tr>
<tr>
<td>CHL8001H</td>
<td>Selected Topics in Public Health Issues</td>
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### Social Justice Education

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<tr>
<td>SJE1909H</td>
<td>Environmental Sustainability and Social Justice 1</td>
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<tr>
<td>SJE1954H</td>
<td>Marginality and the Politics of Resistance</td>
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### Sociology

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<td>SOC6008H</td>
<td>Network Analysis I</td>
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<tr>
<td>SOC6009H</td>
<td>Ethnicity I</td>
</tr>
<tr>
<td>SOC6101H</td>
<td>Sociological Theory II</td>
</tr>
<tr>
<td>SOC6119H</td>
<td>Gender Relations II</td>
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<tr>
<td>SOC6210H</td>
<td>Political Sociology III</td>
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### Women and Gender Studies

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<tr>
<td>WSG1010H</td>
<td>Special Topics in Feminist Studies 2</td>
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<tr>
<td>WSG1013H</td>
<td>Special Topics in Feminist Theory 1</td>
</tr>
<tr>
<td>WSG1014H</td>
<td>Special Topics in Feminist Theory 2</td>
</tr>
<tr>
<td>WSG1016H</td>
<td>Migration, Mobility, and Displacement in Contemporary Africa</td>
</tr>
<tr>
<td>WSG1017H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WSG1019H</td>
<td>Special Topics in Feminist Studies</td>
</tr>
<tr>
<td>WSG1020H</td>
<td>Gender and Globalization: Transnational Perspectives</td>
</tr>
</tbody>
</table>
Developmental Biology: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

- Biochemistry — MSc, PhD
- Biomedical Engineering — MSc, PhD
- Cell and Systems Biology — MSc, PhD
- Clinical Engineering — MSc
- Immunology — MSc, PhD
- Laboratory Medicine and Pathobiology — MSc, PhD
- Medical Science — MSc, PhD
- Molecular Genetics — MSc, PhD
- Physiology — MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Developmental Biology. The objectives of the specialization are to:

- promote and foster excellence in developmental biology research in Toronto;
- provide a means for master's and PhD graduate students working on developmental biology projects to be exposed to a broad range of issues and approaches in modern developmental biology;
- provide a single, comprehensive, advanced PhD-level graduate course to complement a number of introductory courses provided by different graduate units;
- provide a forum for interaction between investigators in developmental biology in different graduate units via participation in student seminars, supervisory committees, journal clubs, retreats, and seminars/symposia.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Developmental Biology” on their transcript.

Contact and Address

Web: devbio.utoronto.ca
Email: bret.pearson@sickkids.ca
Telephone: (416) 813-7654 ext. 328370

Developmental Biology: Master’s Level

Admission Requirements

- Students who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.

Program Requirements

- Be registered in the master's program of one of the participating graduate units and must be undertaking research in developmental biology under the supervision of a member of the collaborative specialization.
- Complete all degree program requirements of the participating graduate unit. In addition, they must complete the interdepartmental course JDB1024Y.
- Complete an MSc thesis in the topic area of developmental biology.

Developmental Biology: Doctoral Level

Admission Requirements

- Students who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Prospective students should contact the collaborative specialization director for additional details on admission procedures and course requirements.

Program Requirements

- Meet all respective degree requirements of the School of Graduate Studies, the home graduate unit, and the collaborative specialization.
- Be registered in the doctoral program of one of the host graduate units and must be undertaking research in developmental biology under the supervision of a member of the collaborative specialization.
• Complete all degree requirements of the participating graduate unit. In addition, they must complete the interdepartmental course JDB1025H and the seminar course JDB1026Y. These courses may be taken in place of some host graduate unit courses.
• Complete a PhD thesis in the topic area of developmental biology.

Developmental Biology: Courses

The following courses are offered every year:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDB1024Y</td>
<td>Topics in Developmental Biology</td>
</tr>
<tr>
<td>JDB1025H</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>JDB1026Y</td>
<td>Student Seminars in Developmental Biology</td>
</tr>
</tbody>
</table>
Diaspora and Transnational Studies

Diaspora and Transnational Studies: Introduction

Lead Faculty of the Collaborative Specialization
Arts and Science

Participating Degree Programs

- Anthropology — MA, MSc, PhD
- Art History — MA, PhD
- Cinema Studies — MA
- Comparative Literature — MA, PhD
- Criminology and Sociolegal Studies — MA, PhD
- Drama, Theatre and Performance Studies — MA, PhD
- English — MA, PhD
- Geography — MA, MSc, PhD
- Germanic Languages and Literatures — MA
- Germanic Literature, Culture and Theory — PhD
- History — MA, PhD
- Near and Middle Eastern Civilizations — MA, PhD
- Political Science — MA, PhD
- Religion — MA, PhD
- Slavic Languages and Literatures — MA, PhD
- Social Justice Education — MA, MEd, EdD, PhD
- Sociology — MA, PhD
- Spanish — MA, PhD
- Women and Gender Studies — MA, PhD

Supporting Units

- Anne Tanenbaum Centre for Jewish Studies
- Centre for Diaspora and Transnational Studies

Overview

Diaspora in contemporary thought involves the shifting relations between homelands and host nations from the perspective of those who have moved, whether voluntarily or not. Diaspora emphasizes the inescapable lived translocal experiences of many migrant communities that exceed the boundaries of the nation-state. Questions of nostalgia, of the dynamics of co-ethnic identification, of the politics of homeland and host nation, and of the inter-generational shifts in responses to all these are central to studies of diaspora.

Transnationalism, on the other hand, focuses on flows and counterflows and the multistratified connections to which they give rise. It encompasses in its ambit not just the movement of people but also concepts of citizenship and multinational governance, the resources of information technology, and the realities of the global marketplace, among others.

Taken together, the two concepts of diaspora and transnationalism enable our understanding of the complex realities of vast movements of people, goods, ideas, images, technologies, and finance in the world today.

This collaborative specialization is designed to bring together both social science and humanities perspectives to augment our existing tri-campus undergraduate program and to contribute to increased research collaboration between participants in the collaborative specialization.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Diaspora and Transnational Studies” on their transcript.

Contact and Address

Web: cdts.utoronto.ca
Email: cdts@utoronto.ca
Telephone: (416) 946 8464
Fax: (416) 978 7045

Diaspora and Transnational Studies Collaborative Specialization
University of Toronto
Suite 230, 170 St. George Street
Toronto, Ontario M5R 2M8
Canada

Diaspora and Transnational Studies: Master’s Level

Admission Requirements

- Applicants are enrolled in a participating master’s degree program in the graduate unit in which the research is conducted, which is known as the participating home graduate unit. The applicant must meet the admission requirements of both the home graduate unit and the collaborative specialization.

Specialization Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies and the participating unit.
- Students must meet the requirements of the collaborative specialization as follows:
  - 0.5 full-course equivalent (FCE) seminar in Comparative Research Methods in Diaspora and Transnational Studies (DTS). As part of the Research Methods seminar, students are required to submit an ethnographic, archival, or documentary paper on a diasporic community in Toronto or elsewhere.
  - 0.5 FCE DTS topics course (DTS2000H, DTS2001H, or DTS2002H); course themes to be decided each year by the collaborative specialization committee. The DTS collaborative components may be taken as electives for the purpose of satisfying home unit requirements.
The DTS collaborative components may be taken as electives for the purpose of satisfying home unit requirements.

If the student undertakes a major paper or thesis in their home unit, this will be on a topic in diaspora and transnational studies, approved by the collaborative specialization committee.

**Diaspora and Transnational Studies:**

**Doctoral Level**

**Admission Requirements**

- Applicants shall be enrolled in a participating doctoral degree program in the graduate unit in which the research is conducted, which is known as the participating home graduate unit. The applicant shall meet the admission requirements of both the home graduate unit and the collaborative specialization.

- Students who complete the collaborative specialization at the master's level will not be eligible for the program at the doctoral level.

**Specialization Requirements**

- Students must meet all respective degree requirements of the School of Graduate Studies and the participating unit.

- Students must meet the requirements of the collaborative specialization as follows:
  - 0.5 full-course equivalent (FCE) seminar in *Comparative Research Methods in Diaspora and Transnational Studies* (DTS). As part of the Research Methods seminar, students are required to submit an ethnographic, archival, or documentary paper on a diasporic community in Toronto or elsewhere.
  - 0.5 FCE DTS topics course (DTS2000H, DTS2001H, or DTS2002H); course themes to be decided each year by the collaborative specialization committee. The DTS collaborative components may be taken as electives for the purpose of satisfying home unit requirements.
  - The DTS collaborative components may be taken as electives for the purpose of satisfying home department requirements.
  - The student's dissertation in their home department must be on a topic in diaspora and transnational studies, approved by the collaborative specialization committee.

**Diaspora and Transnational Studies: Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTS1000H</td>
<td>Comparative Research Methods in Diaspora and Transnationalism</td>
</tr>
<tr>
<td>DTS2000H</td>
<td>Graduate Topics in Diaspora Studies</td>
</tr>
<tr>
<td>DTS2001H</td>
<td>Graduate Topics in Diaspora Studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTS2002H</td>
<td>Graduate Topics in Diaspora Studies</td>
</tr>
<tr>
<td>JCD5135H</td>
<td>Race, Politics, and Jewishness</td>
</tr>
<tr>
<td>JCD5136H</td>
<td>Migration and Memory: Narratives of Jewish Exile and Displacement</td>
</tr>
</tbody>
</table>
Editing Ancient and Medieval Texts

Editing Ancient and Medieval Texts: Introduction

This collaborative specialization will close on August 31, 2026.

Lead Faculty of the Collaborative Specialization
Arts and Science

Participating Degree Programs
Classics — PhD
English — PhD
History — PhD
Italian Studies — PhD
Medieval Studies — PhD
Music — PhD
Philosophy — PhD
Religion — PhD
Spanish — PhD

Overview

The Collaborative Specialization in Editing Ancient and Medieval Texts offers intensive training in the editing of medieval Latin and vernacular texts, including music. Training in all areas is based on a sound knowledge of Latin, a facility in examining manuscript documents, and an understanding of the principles of editorial method.

Students can choose to focus on editing texts in Latin, texts in Old and Middle English, or texts in other vernacular languages. Students complete a series of courses that deal with the techniques of reading, transcribing, and editing manuscripts, and then complete an editorial project. Upon successful completion of the PhD requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Editing Ancient and Medieval Texts” on their transcript.

Contact and Address

Web: medieval.utoronto.ca
Email: medieval.studies@utoronto.ca
Telephone: (416) 978-4884
Fax: (416) 978-8294

Editing Ancient and Medieval Texts: Doctoral Level

Admission Requirements

- The Collaborative Specialization in Editing Ancient and Medieval Texts is only available to doctoral students in one of the collaborating graduate units.
- Students who wish to be admitted to the collaborative specialization must have passed the Centre for Medieval Studies' Level One Latin examination.

Specialization Requirements

- Students must complete a total of 1.0 full-course equivalent (FCE) as follows:
  - The year-long core seminar MST1111H Higher Seminar in Editing Ancient and Medieval Texts* (0.5 FCE; Credit/No Credit)
  - 0.5 FCE from a course in the relevant language and/or philology of the student's field, chosen with the approval of the home graduate unit and the collaborative specialization director.
- An approved editorial project, which can be a paper for a course in any of the collaborating graduate units, an independent publishable project, or the student's dissertation.
- The student's course of study and overall progress will be reviewed annually by the collaborative specialization director, though ultimate responsibility for the student's progress will remain with the graduate chair of the home program.

+ Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Editing Ancient and Medieval Texts: Courses

Courses marked (PR) have prerequisites; further information may be obtained from the Centre of Medieval Studies’ website.

Italian Studies

ITA1165H Introduction to Italian Philology
## Medieval Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MST1000Y</td>
<td>Medieval Latin I</td>
</tr>
<tr>
<td>MST1101H</td>
<td>Codicology (PR)</td>
</tr>
<tr>
<td>MST1104H</td>
<td>Latin Palaeography I (PR)</td>
</tr>
<tr>
<td>MST1105H</td>
<td>Latin Palaeography II (PR)</td>
</tr>
<tr>
<td>MST1107H</td>
<td>Latin Textual Criticism (PR)</td>
</tr>
<tr>
<td>MST1110H</td>
<td>Diplomatics and Diplomatic Editing (PR)</td>
</tr>
<tr>
<td>MST1111H*</td>
<td>Higher Seminar in Editing Ancient and Medieval Texts (Credit/No Credit)</td>
</tr>
<tr>
<td>MST1115H</td>
<td>English Palaeography (PR)</td>
</tr>
<tr>
<td>MST1384H</td>
<td>The Exeter Book of Old English Verse (PR)</td>
</tr>
<tr>
<td>MST1392H</td>
<td>Editing and Appreciating Wulfstan’s Prose (PR)</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
Education, Francophonies and Diversity

Education, Francophonies and Diversity: Introduction

This information is available in French.

Lead Faculty of the Collaborative Specialization

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

Curriculum and Pedagogy — MA, MEd, PhD
Language and Literacies Education — MA, MEd, PhD
Social Justice Education — MA, MEd, EdD, PhD

Overview

The Collaborative Specialization in Education, Francophonies and Diversity will critically examine educational issues in the context of Francophone linguistic minorities in Ontario, in Canada, and in the world, with the notions of equity, diversity, and minoritization at the core of this critical examination. The emphasis will be on understanding social practices in education, looking specifically at how difference gets constructed, problematized, and transformed.

Upon successful completion of the requirements of the home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Education, Francophonies and Diversity” on their transcript.

Contact and Address

Web: crefo.oise.utoronto.ca
Email: crefo.oise@utoronto.ca
Telephone: (416) 978-1975
Fax: (416) 926-4714

Collaborative Specialization in Education, Francophonies and Diversity
Centre de recherches en éducation franco-ontarienne (CREFO)
Ontario institute for Studies in Education, University of Toronto
252 Bloor Street West, 6th Floor
Toronto, Ontario M5S 1V6 Canada

Education, Francophonies and Diversity: Master's Level

Admission Requirements

- Applicants must apply to and be accepted by both their home program and the Collaborative Specialization in Education, Francophonies and Diversity.
- In addition to corresponding to all home program requirements, applicants must submit:
  - a curriculum vitae
  - a personal statement explaining how their program of study and specific research interests relate to Francophone linguistic minorities education.

Specialization Requirements

- Complete the core course CRE1001H Séminaire d'études : Éducation, francophonies et diversité (0.5 full-course equivalent [FCE]).
- Complete two Education, Francophonies and Diversity elective courses (1.0 FCE).
- Attend at least three sessions in the CREFO Conference Series. Students who are enrolled in an MA or MEd program with a Major Research Project (MRP) component must present their research paper at the CREFO Conference Series (SRM3333H Master's Seminar Series).
- Prepare a thesis or major research paper (depending on the requirements of the home graduate unit) which relates to the focus of the collaborative specialization. Students will be supervised by one of the collaborative specialization’s core faculty in their home graduate unit.

Education, Francophonies and Diversity: Doctoral Level

Admission Requirements

- Applicants must apply to and be accepted by both their home program and the Collaborative Specialization in Education, Francophonies and Diversity.
- In addition to corresponding to all home program requirements, applicants must submit:
  - a curriculum vitae
  - a personal statement explaining how their program of study and specific research interests relate to Francophone linguistic minorities education.

Specialization Requirements

- Complete the core course CRE1001H Séminaire d'études : Éducation, francophonies et diversité (0.5 full-course equivalent [FCE]).
- Complete two Education, Francophonies and Diversity elective courses (1.0 FCE).
- Attend at least three sessions in the CREFO Conference Series. Students must present their research paper at the
• Prepare a thesis which relates to the focus of the collaborative specialization. Students will be supervised by one of the collaborative specialization's core faculty in their home graduate unit.

**Education, Francophones and Diversity: Courses**

Not all courses are offered every year. Please consult the respective graduate unit’s course schedule for details.

**Core Course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRE1001H</td>
<td>Séminaire d’études : Éducation, francophonies et diversité</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL1000H</td>
<td>Les fondements du curriculum et de la pédagogie</td>
</tr>
<tr>
<td>CTL1011H</td>
<td>L'éducation pour l'anti-oppression en milieu scolaire</td>
</tr>
<tr>
<td>CTL1304H</td>
<td>Études culturelles et éducation</td>
</tr>
<tr>
<td>CTL1306H</td>
<td>La recherche qualitative en éducation : bases théoriques et pratiques</td>
</tr>
<tr>
<td>CTL1307H</td>
<td>Identité collective et éducation minoritaire de langue française</td>
</tr>
<tr>
<td>CTL3200H</td>
<td>Analyse du discours</td>
</tr>
<tr>
<td>CTL3201H</td>
<td>Bilinguisme et éducation</td>
</tr>
<tr>
<td>CTL3202H</td>
<td>Politique et aménagement linguistique</td>
</tr>
<tr>
<td>SJE1900H</td>
<td>Introduction à la sociologie de l'éducation</td>
</tr>
<tr>
<td>SJE1951H</td>
<td>L'école, la participation parentale et la communauté</td>
</tr>
<tr>
<td>JTE1952H</td>
<td>Langue, culture, et éducation</td>
</tr>
</tbody>
</table>
Educational Policy

Educational Policy: Introduction

Lead Faculty of the Collaborative Specialization

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

- Adult Education and Community Development — MA, MEd, PhD
- Curriculum and Pedagogy — MA, MEd, PhD
- Developmental Psychology and Education — MA, MEd, PhD
- Educational Leadership and Policy — MA, MEd, EdD, PhD
- Higher Education — MA, MEd, EdD, PhD
- Language and Literacies Education — MA, MEd, PhD
- Social Justice Education — MA, MEd, EdD, PhD

Overview

The Collaborative Specialization in Educational Policy serves students interested in developing an understanding of the factors associated with educational policy development and implementation, with particular emphasis on developing theoretical and practical strategies for improving educational processes. The collaborative specialization’s intellectual objectives include providing students with exposure to cross-field and cross-disciplinary approaches to educational problem framing and problem solving in order to broaden the possibilities for innovative and effective policy analysis; helping students understand how to apply theoretical concepts to particular social and educational problems in particular settings; and understanding the broader social, institutional, and policy contexts within which educational policy processes occur. There are two required courses and an annual lecture series.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Educational Policy” on their transcript.

Contact and Address

Web: www.oise.utoronto.ca/lhae/Programs/Collaborative_Specializations/Educational_Policy.html

Collaborative Specialization in Educational Policy

Ontario institute for Studies in Education

University of Toronto

252 Bloor Street West

Toronto, Ontario M5S 1V6

Canada

Educational Policy: Master's Level

Admission Requirements

- Applicants must apply to and be accepted by both their home program and the Collaborative Specialization in Educational Policy.
- In addition to corresponding to all home program requirements, the applicant shall submit a sample of writing, no longer than three pages, that includes:
  - Relevant personal and/or professional experiences, a career plan, and motivation in seeking admission to the Collaborative Specialization in Educational Policy.
  - An indication of specific courses of interest.
  - For thesis students, a brief outline of a proposed research project.
  - For thesis students, indication of preference of supervisor.
- Applicants who are interested in applying to the collaborative specialization at the time of their initial application to their home graduate program should indicate this on their application and advise referees that letters of support will be used in application for both the home program and the collaborative specialization.
- Students who develop an interest in admission to the collaborative specialization after they have been admitted to their home program may also apply during their course of study. Please direct inquiries to the address listed above.

Specialization Requirements

- All master's students in the collaborative specialization:
  - Take the core half course EDP3045H Educational Policy and Program Evaluation (0.5 FCE).
  - Attend the Collaborative Specialization in Educational Policy Seminar Series over two consecutive sessions. Collaborative Educational Policy Seminars occur once a month; attendance is required.
  - Are encouraged, but not required, to enrol in an elective half course in the area of educational policy selected from the list of electives below.
  - Take the remaining courses for the fulfillment of the degree requirements of the home program.
  - Enrolled in home programs requiring a master's research project or thesis will be required to incorporate educational policy issues in their research; a member of the collaborative specialization core faculty will serve as supervisor or committee member.
- MEd program:
  - The total number of courses required for graduation will equal 6, 8, or 10.
  - Course-only MEd students must take two electives from the list below.
- MA program:
  - The total number of courses required for graduation will equal 6 or 8.
Educational Policy: Doctoral Level

Admission Requirements

- Students interested in participating in the Collaborative Specialization in Educational Policy at the doctoral level must apply to and be accepted by both their home program and the collaborative specialization.
- In addition to corresponding to all home program requirements, the application shall include a sample of writing, no longer than three pages, that includes:
  - Relevant personal and/or professional experiences, a career plan, and motivation in seeking admission to the Collaborative Specialization in Educational Policy.
  - An indication of specific courses of interest.
  - A brief outline of proposed research project.
  - Indication of preference of supervisor.
- Applicants who are interested in applying to the collaborative specialization at the time of their initial application to their home graduate program should indicate this on their application and advise referees that letters of support will be used in application for both the home program and the collaborative specialization.
- Students who develop an interest in admission to the collaborative specialization after they have been admitted to their home program may also apply during their course of study. Please direct inquiries to the address listed above.

Specialization Requirements

- All doctoral students in the collaborative specialization:
  - Take the core half course (0.5 full-course equivalent [FCE]) EDP3045H *Educational Policy and Program Evaluation*, if not already taken.
  - Take the core half course (0.5 FCE) EDP3145H *Advanced Issues in Educational Policy Analysis and Program Evaluation*.
  - Attend the Collaborative Specialization in Educational Policy Seminar Series over two consecutive sessions. Collaborative Educational Policy Seminars occur once a month; attendance is required.
  - Are encouraged, but not required, to consider one or more elective half courses in the area of educational policy selected from the list of electives below. The remaining half courses will be those required for the fulfillment of the degree requirements of the home program.
  - Are required to complete a thesis which incorporates issues of educational policy. A member of the collaborative specialization core faculty will serve as supervisor or committee member.
- The total number of courses required for graduation for both the EdD and PhD will equal eight, depending on the requirements of the student's home program.

Educational Policy: Courses

Not all courses are offered each year. Visit the Collaborative Specialization in Educational Policy (CSEP) website for current course offerings.
**Doctoral-Level Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP3045H</td>
<td>Educational Policy and Program Evaluation</td>
</tr>
<tr>
<td>EDP3145H</td>
<td>Advanced Issues in Educational Policy Analysis and Program Evaluation</td>
</tr>
</tbody>
</table>

**Doctoral-Level Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL3000H</td>
<td>Foundations of Bilingual and Multicultural Education</td>
</tr>
<tr>
<td>CTL3008H</td>
<td>Critical Pedagogy, Language, and Cultural Diversity</td>
</tr>
<tr>
<td>CTL3018H</td>
<td>Language Planning and Policy (Exclusion: CTL3202H)</td>
</tr>
<tr>
<td>JOI3048H</td>
<td>Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)</td>
</tr>
<tr>
<td>JSA5147H</td>
<td>Language, Nationalism, and Post-nationalism</td>
</tr>
<tr>
<td>LHA3041H</td>
<td>Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education</td>
</tr>
<tr>
<td>LHA3043H</td>
<td>Survey Research in Educational Leadership and Policy (RM)</td>
</tr>
<tr>
<td>LHA3064H</td>
<td>Global Governance and Educational Change: the Politics of International Cooperation in Education</td>
</tr>
<tr>
<td>LHA6000H*</td>
<td>Special Topics in Educational Leadership and Policy: Doctoral Level*</td>
</tr>
<tr>
<td>LHA6002H</td>
<td>Special Topics in Educational Leadership and Policy: Doctoral Level</td>
</tr>
<tr>
<td>LHA6005H</td>
<td>Special Topics in Educational Leadership and Policy: Doctoral Level</td>
</tr>
<tr>
<td>SJE2941H</td>
<td>Bourdieu: Theory of Practice in Social Sciences</td>
</tr>
<tr>
<td>SJE6000H*</td>
<td>Special Topics in Social Justice Research in Education: Doctoral Level*</td>
</tr>
</tbody>
</table>

*Special topics courses:* Only the special topics course titles listed on the CSEP website can be counted toward CSEP program requirements in the current year. Please confirm current year courses with the CSEP program administrator.
Engineering Education

Engineering Education: Introduction

Lead Faculty of the Collaborative Specialization

Applied Science and Engineering

Participating Degree Programs

Chemical Engineering and Applied Chemistry — MASc, PhD
Civil Engineering — MASc, PhD
Curriculum and Pedagogy — MA, PhD
Higher Education — MA, MEd, PhD
Mechanical and Industrial Engineering — MASc, PhD

Overview

The Collaborative Specialization in Engineering Education is an interdisciplinary initiative designed for students within home programs in engineering or education who are interested in pursuing courses and research in engineering education. This collaborative specialization allows students to join a small community of scholars interested in research and learning at the nexus of education and engineering practice. A core course provides students with an introduction to engineering learning, knowledge, assessment, and culture and community, while the theoretical foundations, methods, and topics related to engineering education research are explored in a seminar course.

Research is supervised by a graduate faculty member in the student’s home graduate unit. Opportunities exist to assess and apply research findings as part of instructional initiatives within the Faculty of Applied Science and Engineering. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Engineering Education” on their transcript.

Contact and Address

Web: gradstudies.engineering.utoronto.ca/research-degrees/collaborative-program-engineering-education and istep.utoronto.ca/student-programming/enged/
Email: istep@utoronto.ca
Telephone: (416) 978-2821

Collaborative Specialization in Engineering Education
Institute for Studies in Transdisciplinary Engineering Education & Practice (ISTEP)
55 College Street, Room 723
Toronto, Ontario M5S 0C9
Canada

Engineering Education: Master's Level

Admission Requirements

- Applicants to the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants to the collaborative specialization must submit the following:
  - curriculum vitae (CV)
  - personal statement explaining how the proposed plan of study and specific research interests relate to engineering education
  - letter of recommendation from a faculty member confirming their willingness to supervise and support the student’s research and outlining why the student would be well suited for the Engineering Education Collaborative Specialization.

Specialization Requirements

Students must meet all respective degree requirements of the School of Graduate Studies, the participating home graduate unit, and the collaborative specialization. Collaborative specialization students must:

- Successfully complete a total of 0.5 full-course equivalent (FCE) as follows:
  - the core course TEP1204H Instructional Design in Engineering Education.
- Participate continuously in a seminar series TEP1205Y Engineering Education Research Seminar (Credit/No Credit).
- Undertake the major paper or thesis required by the home degree program with a focus on engineering education under the supervision of a collaborative specialization core faculty member.

Engineering Education: Doctoral Level

Admission Requirements

- Applicants to the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants to the collaborative specialization must submit the following:
  - curriculum vitae (CV)
  - personal statement explaining how the plan of study and specific research interests relate to engineering education
  - letter of recommendation from a faculty member confirming their willingness to supervise and support the student’s research and outlining why the student would be well suited for the Engineering Education Collaborative Specialization.
Specialization Requirements

Students must meet all respective degree requirements of the School of Graduate Studies, the participating home graduate unit, and the collaborative specialization. Collaborative specialization students must:

- Successfully complete a total of **1.0 full-course equivalent (FCE)** as follows:
  - the core course TEP1204H *Instructional Design in Engineering Education* (0.5 FCE)
  - an elective course in engineering education (0.5 FCE); see the elective course list.
- Participate continuously in a seminar series TEP1206Y0 *Engineering Education Research Seminar — Doctoral Level* (Credit/No Credit) beginning in Year 1; deliver a seminar on the research topic in Year 2; design and deliver one or more instructional workshops and make a final presentation on their research, both in the final year.
- Complete the thesis required by the home degree program with a focus on engineering education under the supervision of a collaborative specialization core faculty member.
- Complete the core course TEP1204H; students who have completed the course at the master’s level may substitute an elective course at the doctoral level from the elective list and with the approval of the collaborative specialization director.

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**Course that may continue over a program. The course is graded when completed.**

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**Engineering Education: Courses**

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEP1204H</td>
<td>Instructional Design in Engineering Education</td>
</tr>
<tr>
<td>TEP1205Y</td>
<td>Engineering Education Research Seminar — Master’s Level (Credit/No Credit)</td>
</tr>
<tr>
<td>TEP1206Y0</td>
<td>Engineering Education Research Seminar — Doctoral Level (Credit/No Credit)</td>
</tr>
</tbody>
</table>

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**Elective Courses (PhD Level Only)**

**Department of Curriculum, Teaching and Learning**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL1018H</td>
<td>Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning</td>
</tr>
<tr>
<td>CTL1041H</td>
<td>Research Methods in Education</td>
</tr>
<tr>
<td>CTL1042H</td>
<td>Instrument Development in Education</td>
</tr>
<tr>
<td>CTL1047H</td>
<td>Course Self-Assessment</td>
</tr>
<tr>
<td>CTL1206H</td>
<td>Teaching and Learning Science</td>
</tr>
<tr>
<td>CTL1207H</td>
<td>Teaching and Learning about Science: Issues and Strategies in Science, Technology, Society and Environment (STSE) Education</td>
</tr>
<tr>
<td>CTL1211H</td>
<td>Action Research in Science, Mathematics, and Technology Education</td>
</tr>
<tr>
<td>CTL1215H</td>
<td>Teaching and Learning about Science and Technology: Beyond Schools</td>
</tr>
<tr>
<td>CTL1218H</td>
<td>Culture and Cognition in Mathematics, Science, and Technology Education</td>
</tr>
<tr>
<td>CTL1306H</td>
<td>Qualitative Research Methods in Education: Concepts and Methods</td>
</tr>
<tr>
<td>CTL1603H</td>
<td>Introduction to Knowledge Building</td>
</tr>
<tr>
<td>CTL1608H</td>
<td>Constructive Learning and Design of Online Environments</td>
</tr>
</tbody>
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**Faculty of Applied Science and Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>APS520H</td>
<td>Technology, Engineering, and Global Development</td>
</tr>
<tr>
<td>APS530H</td>
<td>Appropriate Technology and Design for Global Development</td>
</tr>
<tr>
<td>APS1001H</td>
<td>Project Management</td>
</tr>
<tr>
<td>APS1012H</td>
<td>Managing Business Innovation and Transformational Change</td>
</tr>
<tr>
<td>APS1013H</td>
<td>Applying Innovation in Engineering and Business Operations</td>
</tr>
<tr>
<td>APS1018H</td>
<td>The Engineer in Society — Ethics, History, and Philosophy</td>
</tr>
<tr>
<td>MIE1402H</td>
<td>Experimental Methods in Human Factors Research</td>
</tr>
<tr>
<td>MIE1403H</td>
<td>Analytical Methods in Human Factors Research</td>
</tr>
<tr>
<td>MIE1413H</td>
<td>Statistical Models in Empirical Research</td>
</tr>
<tr>
<td>MIE1415H</td>
<td>Analysis and Design of Cognitive Work</td>
</tr>
<tr>
<td>TEP1010H</td>
<td>Cognitive and Psychological Foundations of Effective Leadership</td>
</tr>
<tr>
<td>TEP1011H</td>
<td>Authentic Leadership: Engineering a Vibrant Future</td>
</tr>
<tr>
<td>TEP1501H</td>
<td>Leadership and Leading in Groups and Organizations</td>
</tr>
<tr>
<td>TEP1502H</td>
<td>Leadership in Product Design</td>
</tr>
</tbody>
</table>
Environmental Studies

Environmental Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Anthropology — MA, MSc, PhD
Chemical Engineering and Applied Chemistry — MASc, MEng, PhD
Chemistry — MSc, PhD
Civil Engineering — MASc, MEng, MEngCEM, PhD
Earth Sciences — MASC, MSc, PhD
Ecology and Evolutionary Biology — PhD
Environmental Science — MEnvSc, PhD
Forest Conservation — MFC
Forestry — MScF, PhD
Geography — MA, MSc, PhD
Global Affairs — MGA
Information — MI, PhD
Landscape Architecture — MLA
Management — MBA, PhD
Music — MA, PhD
Physics — MSc, PhD
Planning — MScPl, PhD
Political Science — MA, PhD
Public Policy — MPP
Religion — MA, PhD
Social Justice Education — MA, MEd, EdD, PhD
Sociology — MA, PhD
Sustainability Management — MScSM
Women and Gender Studies — MA, PhD

Overview

The graduate degree programs listed above participate in the Collaborative Specialization in Environmental Studies (CSES), which is offered through the School of the Environment. Students admitted to a graduate degree program in a participating degree-granting unit, also called the home department or home unit, can apply to the CSES and pursue coursework and research on topics related to the environment. The School of the Environment currently has graduate students from across the disciplinary spectrum.

The CSES provides interested students an opportunity to examine environmental-related issues from different disciplinary perspectives and gain insights about the importance of understanding and applying interdisciplinary approaches and methodological concepts and tools in environmental decision making. The purpose is to complement the discipline-based learning and research focus of their home units by providing students an interdisciplinary forum to examine, discuss, and address environmental issues. With participating students from as many as 20 different disciplines, the core course, ENV1001H Environmental Decision Making, gives students a unique opportunity to engage with faculty and peers coming from a range of academic backgrounds and perspectives.

Upon successful completion of the degree requirements of the participating home graduate unit and the CSES, students will receive the notation “Completed Collaborative Specialization in Environmental Studies” on their transcript.

Contact and Address

Web: environment.utoronto.ca/graduate
Email: grad.director.env@utoronto.ca or grad.office.env@utoronto.ca
Telephone: (416) 978-3475
Fax: (416) 978-3884

Collaborative Specialization in Environmental Studies
School of the Environment, Earth Sciences Centre
University of Toronto
Room 1016V, 33 Willcocks Street
Toronto, Ontario M5S 3E8
Canada

Environmental Studies: Master's Level

Admission Requirements

- Students who wish to enrol in the Collaborative Specialization in Environmental Studies (CSES) offered by the School of the Environment must first apply to and be accepted into a master's program in a degree-granting unit, also called a home department or home unit. Information about applying to a master's program can be found on the School of Graduate Studies website as well as on the respective websites of participating degree-granting units.
- Prospective students who are planning to enrol in the CSES are strongly encouraged to submit copies of the documents outlined on the School of the Environment website by the application deadline established by the degree program admission committee in the home department. Applicants should contact the home department they are applying to in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in the CSES beyond the deadline set by their home department, provided that students will be able to complete the CSES requirements by the time they are ready to graduate from their degree program.

Specialization Requirements

- The requirements listed below must be completed in combination with that expected for the master's degree program of the home department. These are normally counted as electives toward the degree program requirements of the student’s home department. Typically, students complete up to 1.0 full-course equivalent (FCE) and conduct research on an environmental topic. Please note that requirements in some participating programs may...
vary. Therefore, students are encouraged to check the calendar entries for their respective home department degree programs. The School of the Environment also offers students in the non-thesis master's degree stream the opportunity to complete an internship in fulfillment of the CSES, unless they have an internship component built into their degree program. The CSES requirements for each participating degree program are listed on the School of the Environment website under the Collaborative Specialization in Environmental Studies.

Master's Degrees Coursework Option

- Complete the mandatory core course ENV1001H (0.5 FCE).
- Complete one elective course (0.5 FCE) from the School's list of approved courses.
- Complete an environment-related internship of approximately three months full-time employment (ENV4444Y; 1.0 FCE), unless students have an internship requirement included in their degree program.
- Produce a brief research paper on an environment-related topic, which may be related to the internship experience (ENV5555Y; 1.0 FCE), unless students have a research paper requirement included in their degree program.

Note: For a complete and most up-to-date list of CSES requirements by each participating degree program for master's students in the coursework option, please visit the School of the Environment website and click on the home department or degree program.

Master's Degrees Thesis Option

- Complete the mandatory core course ENV1001H (0.5 FCE).
- Complete one elective course (0.5 FCE) from the School's list of approved courses.
- Write a thesis in the home department on an environment-related topic.

Note: For a complete and most up-to-date list of CSES requirements by each participating degree program for master's students in the thesis option, please visit the School of the Environment website and click on the home department or degree program.

Specialization Requirements

- The requirements listed below must be completed in combination with the PhD degree program requirements of the student's home department. These are normally counted as electives toward the degree program requirements of the student's respective home department. Typically, students complete up to 1.0 full-course equivalent (FCE) and conduct research on an environmental topic. Please note that requirements in some participating programs vary slightly. Therefore, students are encouraged to check the calendar entries for their respective home department programs. Specific requirements for each participating degree program are listed on the School of the Environment's website under Collaborative Specialization in Environmental Studies.
- Complete the mandatory core course ENV1001H (0.5 FCE), unless already completed at the master's level.
- Complete one elective course (0.5 FCE) from the School's list of approved courses.
- Give an oral presentation of their doctoral research as part of the School's Environment Seminar Series or Research Day, which is held once per year. For the latter, the oral presentation may or may not be done in conjunction with a summary poster, depending on the decided format of the School's Research Day in any given year.
- Complete a thesis on an environmental topic in the home department. It is recommend that the thesis committee membership will include a supervisor (from the student's home department who is a member of the CSES core faculty and a member of the graduate faculty in the School of the Environment) and at least one other member from a collaborating unit. If the student's primary thesis supervisor does not hold a graduate faculty membership (GFM) at the School of the Environment, the School's Director will initiate the process of assigning a GFM to the primary supervisor. A copy of the final thesis must be submitted to the School of the Environment prior to graduation.
- Additional courses may be required by the home department and/or by the supervisor or supervisory committee, depending on academic and/or career goals of the student, as well as graduate unit regulations.
- A supervisor or supervisory committee may be appointed for each student by the home department and the School of the Environment.

Note: For a complete and most up-to-date list of CSES by each participating degree program for doctoral students, please visit the School of the Environment website and click on the home graduate unit or degree program.

Prospective students are strongly encouraged to submit copies of the documents indicated on the School of the Environment website by the application deadline established by the degree program admission committee in the home department. Applicants should contact the home department they are applying to in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in the CSES beyond the deadline set by their home department, provided that students will be able to complete the CSES requirements by the time they are ready to graduate from their degree program.

Environmental Studies: Doctoral Level

Admission Requirements

- Students who wish to enrol in the CSES offered by the School of the Environment must first apply to and be accepted into a doctoral program in a degree-granting unit, also called a home department or home unit. Information about applying to a home graduate unit can be found on the School of Graduate Studies website as well as on the respective websites of participating degree-granting units.

Note: For a complete and most up-to-date list of CSES by each participating degree program for doctoral students, please visit the School of the Environment website and click on the home graduate unit or degree program.
## Environmental Studies: Courses

The School of the Environment offers individual credit courses that are open to graduate students from all parts of the University, subject to enrolment limits. Except for the core course, ENV1001H, not all courses are offered every year. Graduate students enrolled in the CSES are also allowed to take electives listed for the School’s Collaborative Specialization in Environment and Health (CSEH) to fulfill the specialization requirements. For a current graduate course listing, please refer to the School of the Environment's website.

### Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV1001H</td>
<td>Environmental Decision Making</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV1002H</td>
<td>Environmental Policy</td>
</tr>
<tr>
<td>ENV1007H</td>
<td>The Warming Papers: The Scientific Foundation of Climate Change</td>
</tr>
<tr>
<td>ENV1008H</td>
<td>Worldviews and Ecology</td>
</tr>
<tr>
<td>ENV1103H</td>
<td>Living Labs for Applied Sustainability</td>
</tr>
<tr>
<td>ENV1444H</td>
<td>Capitalist Nature</td>
</tr>
<tr>
<td>ENV1701H</td>
<td>Environmental Law</td>
</tr>
<tr>
<td>ENV1703H</td>
<td>Water Resource Management and Policy</td>
</tr>
<tr>
<td>ENV1704H</td>
<td>Environmental Risk Analysis and Management</td>
</tr>
<tr>
<td>ENV1707H</td>
<td>Environmental Finance and Sustainable Investing</td>
</tr>
<tr>
<td>ENV2000H,Y</td>
<td>Topics in Environment</td>
</tr>
<tr>
<td>ENV2002H</td>
<td>Special Topics in Environment</td>
</tr>
<tr>
<td>ENV4444Y</td>
<td>Internship</td>
</tr>
<tr>
<td>ENV5555Y</td>
<td>Research Paper</td>
</tr>
</tbody>
</table>

### Elective Joint Courses with the School of the Environment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>JGE1413H</td>
<td>Workshop in Environmental Impact Assessment</td>
</tr>
<tr>
<td>JGE1420H</td>
<td>Urban Waste Management: an International Perspective</td>
</tr>
<tr>
<td>JGE1425H</td>
<td>Livelihoods, Poverty, and Environment in the Developing Countries</td>
</tr>
<tr>
<td>JSE1708H</td>
<td>Sustainability and the Western Mind</td>
</tr>
</tbody>
</table>

### Other Elective Courses

#### Adult Education and Community Development (Department of Leadership, Higher and Adult Education)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHA1104H</td>
<td>Social Action Education — Community Development, Social Services, and Social Movements</td>
</tr>
<tr>
<td>LHA1160H</td>
<td>Introduction to Transformative Learning Studies</td>
</tr>
<tr>
<td>LHA1193H</td>
<td>Adult Education for Sustainability</td>
</tr>
<tr>
<td>LHA5100H</td>
<td>Special Topics in Adult Education and Community Development: Master’s Level</td>
</tr>
<tr>
<td>LHA6100H</td>
<td>Special Topics in Adult Education and Community Development: Doctoral Level</td>
</tr>
</tbody>
</table>

#### Anthropology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ANT6018H</td>
<td>Approaches to Nature and Culture</td>
</tr>
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</table>

#### Chemical Engineering and Applied Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CHE1435H</td>
<td>Fundamentals of Aerosol Physics and Chemistry</td>
</tr>
<tr>
<td>JNC2503H</td>
<td>Environmental Pathways</td>
</tr>
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#### Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHM1401H</td>
<td>Transport and Fate of Chemical Species in the Environment</td>
</tr>
<tr>
<td>CHM1404H</td>
<td>Molecular Analysis of Natural Systems</td>
</tr>
<tr>
<td>CHM1410H</td>
<td>Analytical Environmental Chemistry</td>
</tr>
<tr>
<td>CHM1415H</td>
<td>Atmospheric Chemistry</td>
</tr>
<tr>
<td>CHM1420H</td>
<td>Environmental Chemistry of Soil</td>
</tr>
<tr>
<td>CHM1425H</td>
<td>Modelling the Fate of Organic Chemicals in the Environment</td>
</tr>
</tbody>
</table>

#### Computer Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CSC2720H</td>
<td>Systems Thinking for Global Problems</td>
</tr>
</tbody>
</table>

#### English

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ENG5580H</td>
<td>American Pastoral</td>
</tr>
<tr>
<td>ENG6181H</td>
<td>Permaculture and Literature</td>
</tr>
</tbody>
</table>
### Forestry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR1270H</td>
<td>Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier</td>
</tr>
<tr>
<td>FOR1288H</td>
<td>Design and Manufacturing of Biomaterials</td>
</tr>
<tr>
<td>FOR1294H</td>
<td>Bioenergy and Biorefinery Technology</td>
</tr>
<tr>
<td>FOR1416H</td>
<td>Forest Fire Danger Rating</td>
</tr>
<tr>
<td>FOR1555H</td>
<td>Wildlife Ecology and Conservation</td>
</tr>
<tr>
<td>FOR1575H</td>
<td>Urban Forest Conservation</td>
</tr>
<tr>
<td>JFG1610H</td>
<td>Sustainable Forest Management and Certification</td>
</tr>
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</table>

### Mechanical and Industrial Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MIE1120H</td>
<td>Current Energy Infrastructure and Resources</td>
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### Physics

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<th>Course Code</th>
<th>Course Title</th>
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</thead>
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<tr>
<td>PHY1498H</td>
<td>Introduction to Atmospheric Physics</td>
</tr>
<tr>
<td>PHY2502H</td>
<td>Climate System Dynamics</td>
</tr>
<tr>
<td>PHY2504H</td>
<td>Advanced Atmospheric Dynamics</td>
</tr>
<tr>
<td>PHY2505H</td>
<td>Atmospheric Radiative Transfer and Remote Sounding</td>
</tr>
<tr>
<td>PHY2506H</td>
<td>Data Assimilation and Retrieval Theory</td>
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### Political Science

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>POL2213H</td>
<td>Global Environmental Politics</td>
</tr>
</tbody>
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### Social Justice Education

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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SJE1909H</td>
<td>Environmental Sustainability and Social Justice 1</td>
</tr>
<tr>
<td>SJE1919H</td>
<td>Advanced Topics in Environmental Justice Education</td>
</tr>
<tr>
<td>SJE2999H</td>
<td>Special Topics in Sociological Research in Education (this course will be allowed as an elective provided it has environmental studies content)</td>
</tr>
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### Global Affairs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>JSE1708H</td>
<td>Sustainability and the Western Mind</td>
</tr>
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</table>

### History and Philosophy of Science and Technology

<table>
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<th>Course Code</th>
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<tbody>
<tr>
<td>HPS4106H</td>
<td>Environment and STS</td>
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### Management

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<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>RSM2615H</td>
<td>Special Topics in Organizational Behaviour and Human Resource Management</td>
</tr>
</tbody>
</table>
Environment and Health

Environment and Health: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Chemical Engineering and Applied Chemistry — MASc, MEng, PhD
Community Health — MScCH
Environmental Science — MEnvSc, PhD
Forest Conservation — MFC
Forestry — MScF, PhD
Geography — MA, MSc, PhD
Landscape Architecture — MLA
Medical Science — MSc, PhD
Music — MA, MMus, PhD
Planning — MScPl, PhD
Public Health Sciences — MPH, PhD
Women and Gender Studies — MA, PhD

Overview

The graduate degree programs listed above participate in the Collaborative Specialization in Environment and Health (CSEH), which is offered through the School of the Environment. Graduate students admitted to a participating graduate degree program in a degree-granting unit, also called a home department or home unit, can apply to the CSEH and pursue coursework and research in areas related to environment and health. The School of the Environment currently has graduate students from across the disciplinary spectrum.

The study of environment and health recognizes that human health is fundamentally dependent on a healthy environment. With a focus on understanding the human health implications of chemical, biological, and physical hazards in our environment, it encompasses topics such as the health impacts of air and water quality, climate change, contaminated lands and urban design, and the need for interdisciplinary approaches to address them. The CSEH exposes students in the health sciences to broader environmental perspectives on related health issues, while students in environmental studies and sciences can have the opportunity to gain insight about the health implications of environmental quality. This specialization may also be of interest to students who are concerned with ethical, pedagogical, and policy approaches to understanding and addressing environment and health issues.

Upon successful completion of the degree requirements of the participating home department and the CSEH, students will receive the notation “Completed Collaborative Specialization in Environment and Health” on their transcript.

Contact and Address

Web: environment.utoronto.ca/graduate
Email: grad.director.env@utoronto.ca or grad.office.env@utoronto.ca
Telephone: (416) 978-3475
Fax: (416) 978-3884

Collaborative Specialization in Environment and Health
School of the Environment, Earth Sciences Centre
University of Toronto
Room 1016V, 33 Willcocks Street
Toronto, Ontario M5S 3E8
Canada

Environment and Health: Master’s Level

Admission Requirements

• Students who wish to enrol in the CSEH offered by the School of the Environment must first apply to and be accepted into a master’s program in a degree-granting unit, also called a home department or home unit. Information about applying to a home unit can be found on the School of Graduate Studies website as well as on the respective websites of participating degree-granting units.
• Prospective students who are planning to enrol in the CSEH are strongly encouraged to submit copies of the documents outlined on the School of the Environment’s website by the application deadline established by the degree program admission committee in their home department. Applicants should contact the home department they are applying to confirm its application deadline. The School of the Environment also allows potential students to enrol in the CSEH beyond the deadline set by their home department, provided that students will be able to complete the CSEH requirements by the time they are ready to graduate from their degree program.

Specialization Requirements

• The requirements listed below must be completed in combination with that expected for the master’s degree program requirements of the home department. These are normally counted as electives toward the degree program requirements of the student’s home unit. Typically, students complete up to 1.0 full-course equivalent (FCE) and conduct research on an environment and health topic. Please note that requirements in some participating programs vary slightly. Therefore, students are encouraged to check the calendar entries of their respective home department programs. The CSEH requirements for each participating degree program are listed on the School of the Environment’s website under the Collaborative Specialization in Environment and Health.
Master's Degree Coursework Option

- Complete the mandatory core course ENV4001H (0.5 FCE).
- Complete one elective course (0.5 FCE) from the School's list of approved electives below.
- For coursework degree programs that require a research project in their home department, the topic should be within the field of environment and health, as approved by the home department and the School of the Environment. A copy of the final research project must be submitted to the School of the Environment prior to graduation.

Note: For a complete and most up-to-date list of the CSEH requirements by each participating degree program for master's students in the coursework option, please visit the School of the Environment website and click on the home graduate unit or degree program.

Master's Degree Thesis Option

- Complete the mandatory core course ENV4001H (0.5 FCE).
- Complete one elective course (0.5 FCE) from the School's list of approved electives below.
- For degree programs that require a thesis in their home graduate unit, the topic should be within the field of environment and health, as approved by the home unit and the School of the Environment. A copy of the final thesis must be submitted to the School of the Environment prior to graduation.

Note: For a complete and most up-to-date list of the CSEH requirements by each participating degree program for master's students in the coursework option, please visit the School of the Environment website and click on the home graduate unit or degree program.

Environment and Health: Doctoral Level

Admission Requirements

- Students who wish to enrol in the CSEH offered by the School of the Environment must first apply to and be accepted into a doctoral program in a degree-granting unit, also called a home department or home unit. Information about applying to a home department can be found on the School of Graduate Studies website as well as on the respective websites of participating degree-granting units.
- Prospective students are strongly encouraged to submit copies of the documents indicated on the School of the Environment website by the application deadline established by the degree program admission committee in the home unit. Applicants should contact the home department they are applying to in order to confirm its application deadline. The School of the Environment also allows potential students to enrol in the CSEH beyond the deadline set by their home department, provided that students will be able to complete the CSEH requirements by the time they are ready to graduate from their degree program.

Note: For a complete and most up-to-date list of CSEH requirements by each participating degree program for master's students in the coursework option, please visit the School of the Environment website and click on the home graduate unit or degree program.

Specialization Requirements

- The requirements listed below must be completed in combination with the PhD degree program requirements of the student’s respective home department. These are normally counted as electives toward the degree program requirements of the student’s home department. Typically, students complete up to 1.0 full-course equivalent (FCE) and conduct research on an environment and health topic. Please note that requirements in some participating programs vary slightly. Therefore, students are encouraged to check the calendar entries of their respective home department programs. Specific CSEH requirements for each participating degree program are listed on the School of the Environment website under the Collaborative Specialization in Environment and Health.
- Complete the mandatory core course ENV4001H (0.5 FCE), unless already completed at the master's level.
- Complete one elective course (0.5 FCE) from the School's list of approved courses.
- Give an oral presentation of their doctoral research as part of the School’s Environment and Health Seminar Series or Research Day, which is held once per year. For the latter, the oral presentation may or may not be done in conjunction with a summary poster, depending on the decided format of the School’s Research Day in any given year.
- Complete a thesis on a theme in environment and health. It is recommended that the thesis committee membership will include a supervisor (from the student's home department who is a member of the CSEH core faculty and a member of the graduate faculty in the School of the Environment) and at least one other member from a collaborating department. If the student’s primary thesis supervisor does not hold a graduate faculty membership (GFM) at the School of the Environment, the School’s Director will initiate the process of assigning a GFM to the primary supervisor. A copy of the final thesis must be submitted to the School of the Environment prior to graduation.
- Additional courses may be required by the home department and/or by the supervisor or supervisory committee, depending on academic and/or career goals of the student, as well as departmental regulations.
- A supervisor or supervisory committee may be appointed for each student by the home department and the School of the Environment.

Note: For a complete and most up-to-date list of CSEH requirements by each participating degree program for doctoral students, please visit the School of the Environment website and click on the home department or degree program.

Environment and Health: Courses

The School of the Environment offers individual credit courses that are open to graduate students from all units of the University, subject to enrolment limits. Except for the core course, ENV4001H, not all courses are offered every year. Graduate students enrolled in the CSEH are also allowed to take electives listed for the School’s Collaborative Specialization in Environmental Studies (CSES) to fulfill the specialization requirements. For a current graduate course listing, please refer to the School of the Environment website.
### Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV4001H</td>
<td>Graduate Seminars in Environment and Health</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV1703H</td>
<td>Water Resources Management and Policy</td>
</tr>
<tr>
<td>ENV1704H</td>
<td>Environmental Risk Analysis and Management</td>
</tr>
<tr>
<td>ENV3000H,Y</td>
<td>Topics in Environment and Health</td>
</tr>
</tbody>
</table>

### Elective Joint Courses with the School of the Environment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>JGE1425H</td>
<td>Livelihoods, Poverty, and Environment in the Developing Countries</td>
</tr>
<tr>
<td>JNC2503H</td>
<td>Environmental Pathways</td>
</tr>
<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
</tr>
<tr>
<td>JNP1016H</td>
<td>Graduate Seminar in Toxicology</td>
</tr>
</tbody>
</table>

### Other Elective Courses

#### Adult Education and Community Development (Department of Leadership, Higher and Adult Education)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHA1197H</td>
<td>The Pedagogy of Food</td>
</tr>
</tbody>
</table>

#### Chemical Engineering and Applied Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE1435H</td>
<td>Fundamentals of Aerosol Physics and Chemistry</td>
</tr>
<tr>
<td>JNC2503H</td>
<td>Environmental Pathways</td>
</tr>
</tbody>
</table>

#### Geography and Planning

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGR1422H</td>
<td>The Geography of Urban Air Pollution</td>
</tr>
<tr>
<td>JGE1425H</td>
<td>Livelihoods, Poverty, and Environment in the Developing Countries</td>
</tr>
<tr>
<td>JPG1421H</td>
<td>Health in Urban Environments</td>
</tr>
<tr>
<td>JPG1428H</td>
<td>Greening the City: Urban Environmental Planning and Management</td>
</tr>
</tbody>
</table>

#### Pharmacology and Toxicology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
</tr>
<tr>
<td>JNP1016H</td>
<td>Graduate Seminar in Toxicology</td>
</tr>
</tbody>
</table>

#### Public Health Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL5126H</td>
<td>Building Community Resilience</td>
</tr>
<tr>
<td>CHL5413H</td>
<td>Public Health Sanitation</td>
</tr>
<tr>
<td>CHL5416H</td>
<td>Environmental Epidemiology</td>
</tr>
<tr>
<td>CHL5809H</td>
<td>Ecological Public Health</td>
</tr>
<tr>
<td>CHL5903H</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>CHL5910H</td>
<td>Occupational and Environmental Hygiene I</td>
</tr>
<tr>
<td>CHL5911H</td>
<td>Occupational and Environmental Hygiene II</td>
</tr>
<tr>
<td>CHL5921H</td>
<td>Protecting the Public from Air Pollution</td>
</tr>
<tr>
<td>CHL7001H</td>
<td>Directed Reading</td>
</tr>
<tr>
<td>CHL8001H</td>
<td>Selected Topics in Public Health Issues (this course will be allowed as an elective provided it has environmental studies content)</td>
</tr>
</tbody>
</table>
**Social Justice Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJE1909H</td>
<td>Environmental Sustainability and Social Justice 1</td>
</tr>
<tr>
<td>SJE1919H</td>
<td>Advanced Topics in Environmental Justice Education</td>
</tr>
<tr>
<td>SJE2999H</td>
<td>Special Topics in Sociological Research in Education</td>
</tr>
</tbody>
</table>
Ethnic, Immigration and Pluralism Studies

Ethnic, Immigration and Pluralism Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Anthropology — MA, PhD
Educational Leadership and Policy — MA, MEd, EdD, PhD
European and Russian Affairs — MA
Geography — MA, PhD
Global Affairs — MGA
History — MA, PhD
Industrial Relations and Human Resources — MIRHR, PhD
Language and Literatures Education — MA, MEd, PhD
Political Science — MA, PhD
Public Policy — MPP
Religion — MA, PhD
Social Justice Education — MA, MEd, EdD, PhD
Social Work — MSW, PhD
Sociology — MA, PhD
Women and Gender Studies — MA, PhD

Overview

Ethnic, Immigration and Pluralism Studies at the University of Toronto offers students with interests in ethnic, immigration, and pluralism studies the opportunity to widen their horizons, to expand their knowledge beyond a single disciplinary base, and to take advantage of the wealth and diversity of academic resources available at the University of Toronto — a great university situated in a large and culturally cosmopolitan city.

The graduate programs listed above participate in the Collaborative Specialization in Ethnic, Immigration and Pluralism Studies. They contribute courses and provide facilities and supervision for graduate research.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Ethnic, Immigration and Pluralism Studies” on their transcript.

Contact and Address

Web: harneyprogram.ca/portfolio/collaborative-program
Email: harneyprogram@utoronto.ca
Telephone: (416) 978-4783

Collaborative Specialization in Ethnic, Immigration and Pluralism Studies
Munk School of Global Affairs and Public Policy
University of Toronto
1 Devonshire Place, room 064S
Toronto, Ontario M5S 3K7
Canada

Ethnic, Immigration and Pluralism Studies: Master’s Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants to the Master of Arts, Master of Education, Master of Global Affairs, Master of Industrial Relations and Human Resources, Master of Public Policy, Master of Science, and Master of Social Work degree programs are admitted by the participating graduate unit under the General Regulations of the School of Graduate Studies.

Specialization Requirements

- Students must follow a plan of studies acceptable to both the participating graduate unit and the Ethnic, Immigration and Pluralism Studies specialization.
- Collaborative specialization requirements may be met concurrent with, or in addition to, graduate unit requirements. Students should consult specific graduate unit listings for information.
- 1.0 full-course equivalent (FCE) in ethnicity, immigration, or pluralism, of which at least 0.5 FCE will be in a discipline other than the one in which the student is enrolled. Normally, these courses are taken as options within regular graduate unit or Faculty degree requirements, not as additional courses.
- A coordinating 0.5 FCE seminar in ethnicity, immigration, and pluralism. The seminar is the place to discuss, compare, and bring together the various approaches to the study of ethnicity, immigration, and pluralism. As well, students will be expected to present and discuss their projects.
- When a practicum is required, it will focus on ethnicity, immigration, and/or pluralism.
- It is understood that the major paper or thesis as required by the graduate unit will be in an area relevant to the specialization.
Ethnic, Immigration and Pluralism Studies: Doctoral Level

Admission Requirements

• Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
• Applicants to the Doctor of Education and Doctor of Philosophy degree programs are admitted under the General Regulations of the School of Graduate Studies.

Specialization Requirements

• Students must follow a plan of studies acceptable to both the participating graduate unit and the Ethnic, Immigration and Pluralism Studies specialization.
• Collaborative specialization requirements may be met concurrent with, or in addition to, graduate unit requirements. Students should consult specific graduate unit listings for information.
• 2.0 full-course equivalents (FCEs) in ethnicity, immigration, or pluralism including master's-level courses, of which at least 1.0 FCE will be in disciplines other than the one in which the student is enrolled. Normally, these courses are taken as options within regular graduate unit or Faculty degree requirements, not as additional courses.
• A coordinating 0.5 FCE seminar in ethnicity, immigration, and pluralism. The seminar is the place to discuss, compare, and bring together the various approaches to the study of ethnicity, immigration and pluralism. As well, students will be expected to present and discuss their projects. Students who have taken this course for the master's degree need not repeat it.
• When the student's graduate unit requires more than one comprehensive examination, one of the examinations will be in a topic relevant to the specialization.
• When there are no comprehensive examinations, but an examination on the thesis proposal is required, the examination will focus on ethnicity, immigration, and/or pluralism. In all cases the thesis will be on a subject matter dealing with ethnicity, immigration, and/or pluralism.
• The PhD thesis will focus on ethnicity, immigration, and/or pluralism. The supervisor of the thesis committee will be a specialist in the area of ethnicity, immigration, and/or pluralism.

Ethnic, Immigration and Pluralism Studies: Courses

• Courses eligible for credit towards meeting specialization requirements in Ethnic, Immigration and Pluralism Studies are listed below.
• Students should check with the professor responsible for each course since a prerequisite may be required.
• Not all courses are offered each year. Please consult the collaborative specialization office or the appropriate graduate unit for course availability.

• Students wishing to use courses other than those listed below for credit towards meeting specialization requirements must submit a formal request in writing.

Coordinating Seminar

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIP3000H</td>
<td>Coordinating Seminar: Ethnic, Immigration and Pluralism Studies</td>
</tr>
<tr>
<td></td>
<td>(formerly known as JTH3000H Coordinating Seminar: Ethnic Relations</td>
</tr>
<tr>
<td></td>
<td>Theory, Research, and Policy)</td>
</tr>
</tbody>
</table>

Anthropology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT5150H</td>
<td>Nation, State, and Language in Francophone Canada</td>
</tr>
<tr>
<td>ANT6033H</td>
<td>Advanced Research Seminar III</td>
</tr>
</tbody>
</table>

Curriculum, Teaching and Learning

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL1320H</td>
<td>Introduction to Aboriginal Land-Centered Education: Historical and</td>
</tr>
<tr>
<td></td>
<td>Contemporary Perspectives</td>
</tr>
<tr>
<td>CTL1321H</td>
<td>Aboriginal Civilization: Language, Culture, and Identity</td>
</tr>
<tr>
<td>CTL1424H</td>
<td>Religion, Ideology, and Social Movement in the Development of North</td>
</tr>
<tr>
<td></td>
<td>American Education</td>
</tr>
<tr>
<td>CTL1428H</td>
<td>Immigration and the Development of Canadian Education</td>
</tr>
<tr>
<td>CTL1429H</td>
<td>Ethnicity and the Development of Canadian Education</td>
</tr>
<tr>
<td>CTL3026H</td>
<td>Pragmatics in Language Education</td>
</tr>
<tr>
<td>CTL3799H</td>
<td>Special Topics in Language and Literacies Education Program: Master's</td>
</tr>
<tr>
<td></td>
<td>Level</td>
</tr>
<tr>
<td>JTE1952H</td>
<td>Language, Culture, and Education</td>
</tr>
</tbody>
</table>

Economics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO3800H</td>
<td>Labour Economics I</td>
</tr>
</tbody>
</table>

Geography

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPG1506H</td>
<td>State/Space/Difference: Understanding the New Social Geography of the</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td>JPG1805H</td>
<td>Transnationalism, Diaspora, and Gender</td>
</tr>
</tbody>
</table>

History

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS1117H</td>
<td>Canada: Colonialism/Postcolonialism</td>
</tr>
</tbody>
</table>
Participation in LAW courses is at the discretion of the Faculty of Law upon presentation, to the Faculty of Law Records Office, of a signed permission form from the student's home graduate unit. Note that preference is given to JD students and that many LAW courses are full by the end of the Faculty of Law add/drop period.
Food Studies

Food Studies: Introduction

Lead Faculty of the Collaborative Specialization

University of Toronto Scarborough

Participating Degree Programs

Anthropology — MA, PhD
East Asian Studies — MA, PhD
Environmental Science — PhD
Geography — MA, MSc, PhD
History — MA, PhD
Information — MI
Museum Studies — MMSt
Nutritional Sciences — MSc, PhD
Public Health Sciences — PhD
Sociology — MA, PhD

Supporting Units

Culinaria Research Centre

Overview

Food Studies is an interdisciplinary field dedicated to understanding where our food comes from and how it shapes our bodies and identities. The production and consumption of food has gone through tremendous changes in the past few hundred years. Before industrialization, most food was grown in the place where it was eaten. With the rise of global commodity agriculture, it is often hard to find out exactly what our food is and where it comes from. Then, famine was a constant spectre, whereas today, over-eating has become a significant health problem.

Particular attention will be given to the material nature of food, the way it tastes and smells, and the changes it undergoes through natural decomposition and through the human intervention of preservation and cooking. Students will learn the importance of food in religion, society, the family, gender roles, the environment, agriculture, urbanization, immigration, colonialism, and race and ethnicity. Food Studies will leverage the University’s urban location and its proximity to Canada’s agricultural heartland to broaden students’ experience. The study of food provides both theoretical understanding and practical knowledge for professional careers in health care, business, government service, non-governmental organizations, and educational and community programs. This specialization will draw on a variety of disciplinary approaches emphasizing different knowledge and skills.

The collaborative specialization is open to master’s and PhD students in the participating graduate programs listed above. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Food Studies” on their transcript.

Contact and Address

Web: www.utsc.utoronto.ca/culinaria
Email: culinaria.utsc@utoronto.ca
Telephone: (416) 208-8175

Collaborative Specialization in Food Studies
University of Toronto Scarborough
1265 Military Trail
Toronto, Ontario M1C 1A4
Canada

Food Studies: Master’s Level

Admission Requirements

• Applicants must meet the admission requirements of both the home graduate unit and the collaborative specialization.
• Applicants must apply to and be admitted to both the collaborative specialization and a participating master’s degree program.
• A curriculum vitae (CV).
• Applicants must demonstrate superior writing and research skills, as well as an interest in the socio-cultural aspects of food. Applicants will submit to the collaborative specialization committee a research paper (maximum 30 pages) that has been submitted to the home graduate unit, or one that is focused on food studies.
• Letters from two references. The letters of reference should describe the student’s academic ability and career aspirations, and comment on the student’s potential benefit from the collaborative specialization.
• Some undergraduate experience in food-related coursework is desired.

Specialization Requirements

MA in Anthropology; MA in East Asian Studies (Thesis Option); MA and MSc in Geography; MA in History; MSc in Nutritional Sciences; MA in Sociology (Research Paper Option); MI Concentration Plus Thesis Option; MI General Pathway Plus Thesis Option

• Students must meet all the degree requirements of the School of Graduate Studies, the participating home program, and the collaborative specialization.
• Successful completion of the seminar FST1000H Comparative Research Methods in Food Studies (0.5 full-course equivalent [FCE]).
• Regular and active participation in SRM3333H Culinaria Seminar Series.
• The major research paper or thesis in the participating degree program will be on a topic in food studies, approved by the collaborative specialization committee.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

MA in East Asian Studies (Coursework-Only Option); MA in Sociology (Coursework-Only Option)

• Students must meet all the degree requirements of the School of Graduate Studies, the participating home program, and the collaborative specialization.
• Successful completion of the seminar FST1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
• Successful completion of 1.0 elective FCE related to food studies.
• Regular and active participation in SRM3333H *Culinaria Seminar Series*.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Food Studies: Doctoral Level

Admission Requirements

• Applicants must meet the admission requirements of both the home graduate unit and the collaborative specialization.
• Applicants must apply to and be admitted to both the collaborative specialization and a participating doctoral degree program.
• Students who complete the collaborative specialization at the master's level will be eligible for the program at the doctoral level, but will be expected to complete an additional topics course (see below).
• A curriculum vitae (CV).
• Applicants must demonstrate superior writing and research skills, as well as an interest in the socio-cultural aspects of food. Applicants will submit to the collaborative specialization committee a master’s-level research project paper or thesis. Experience in a food-related field (either practical, scholarly, or policy/political/social service) is beneficial.

Specialization Requirements

MI Coursework-Only Option

• Students must meet all the degree requirements of the School of Graduate Studies, the participating home program, and the collaborative specialization.
• Successful completion of the practicum INF2173H (0.5 FCE; Credit/No Credit) in an area related to food studies.
• Successful completion of 1.5 elective FCEs related to food studies.
• Regular and active participation in SRM3333H *Culinaria Seminar Series*.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

MMSt Coursework-Only Option

• Students must meet all the degree requirements of the School of Graduate Studies, the participating home program, and the collaborative specialization.
• Successful completion of the seminar FST1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
• Successful completion of the topics course FST2000H *Food, Culture, and Society* (0.5 FCE). The course theme will be decided each year by the collaborative specialization committee.
• Successful completion of 2.0 FCEs from a combination of:
  o an internship MSL3000Y (1.0 FCE) related to food studies;
  o a project MSL4000Y (1.0 FCE) related to food studies;
  o up to 2.0 elective FCEs related to food studies.
• Regular and active participation in SRM3333H *Culinaria Seminar Series*.
• Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Food Studies: Courses

Required

| FST1000H | Comparative Research Methods in Food Studies |
Electives

These courses may have prerequisites and enrolment limits. These courses may not be offered every year. Students may take courses not listed below with approval of the collaborative specialization director.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT4039H</td>
<td>Origin and Nature of Food Producing Societies</td>
</tr>
<tr>
<td>CHL5652H</td>
<td>Foundations of Practice III</td>
</tr>
<tr>
<td>HIS1301H</td>
<td>History of Food and Drink</td>
</tr>
<tr>
<td>JPG1429H</td>
<td>Political Ecology of Food and Agriculture</td>
</tr>
<tr>
<td>LHA1197H</td>
<td>The Pedagogy of Food</td>
</tr>
<tr>
<td>MST1370H</td>
<td>From Farm to Market: Social and Economic Transformation in Medieval Europe</td>
</tr>
<tr>
<td>NFS1201H</td>
<td>Public Health Nutrition</td>
</tr>
<tr>
<td>NFS1212H</td>
<td>Regulation of Food Composition, Health Claims, and Safety</td>
</tr>
<tr>
<td>NFS1216H</td>
<td>Selected Topics in Nutrition</td>
</tr>
<tr>
<td>NFS1218H</td>
<td>Recent Advances in Nutritional Sciences I</td>
</tr>
</tbody>
</table>
Genome Biology and Bioinformatics

Genome Biology and Bioinformatics: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Biochemistry — PhD
Biomedical Engineering — PhD
Cell and Systems Biology — PhD
Chemical Engineering and Applied Chemistry — PhD
Computer Science — PhD
Ecology and Evolutionary Biology — PhD
Laboratory Medicine and Pathobiology — PhD
Medical Biophysics — PhD
Medical Science — PhD
Molecular Genetics — PhD

Overview

The availability of complete genome sequences of many organisms has led to the appreciation that our knowledge of the function of the genome and other omics of any given organism is far from complete. A wide range of computational, theoretical, biochemical, structural, cell biological, and genetic approaches need to cooperate to establish the connections between sequence and function. The Collaborative Specialization in Genome Biology and Bioinformatics addresses this need for cooperation with a coherent course of study that educates, trains, and provides community for doctoral graduate students across these diverse disciplines.

The graduate programs listed above participate in the Collaborative Specialization in Genome Biology and Bioinformatics. Upon successful completion of the PhD requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Genome Biology and Bioinformatics" on their transcript.

Contact and Address

Web: gbb.csb.utoronto.ca
Email: m.casco@utoronto.ca
Telephone: (416) 978-5636
Global Health

Global Health (U of T Global Scholar): Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Anthropology — MA, MSc, PhD
Chemical Engineering and Applied Chemistry — MAsc, MEng, PhD
Community Health — MScCH
Dentistry — MSc (thesis only), PhD
Geography — MA, MSc, PhD
Health Policy, Management and Evaluation — MSc (thesis only), PhD
Law — LLM, SJD
Management — PhD
Medical Science — PhD
Nursing Science — PhD
Pharmaceutical Sciences — MSc (thesis only), PhD
Planning — MScPI, PhD
Political Science — PhD
Public Health Sciences — MPH, MSc (thesis only), PhD
Rehabilitation Science — MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Global Health (U of T Global Scholar). This specialization offers students collaborative and interdisciplinary graduate education and research opportunities in global health. Global health is viewed as an integrative construct that focuses on the inter-relationships between local, regional, national, and international factors influencing health and health equity and effective programs and policies that will address these factors.

The Collaborative Specialization in Global Health (U of T Global Scholar) enhances the student experience by exposing students to a broad base of faculty expertise and an opportunity to share research ideas and results from multiple disciplinary perspectives. This specialization signals the University's commitment to improving the well-being of people in Canada and around the world through higher education and advanced research in global health.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Global Health (U of T Global Scholar)" on their transcript.

Students who complete the requirements of the Collaborative Specialization in Global Health are considered University of Toronto Global Scholars.

Contact and Address

Web: www.dlsph.utoronto.ca/institutes/centre-for-global-health
Email: ghoffice.dlpsh@utoronto.ca
Telephone: (416) 946-7909

Collaborative Specialization in Global Health (U of T Global Scholar)
Centre for Global Public Health
Dalla Lana School of Public Health
University of Toronto
155 College Street, Room 400
Toronto, Ontario M5T 3M7
Canada

Global Health (U of T Global Scholar): Master's Level

Admission Requirements

- Applicants must meet the admission requirements of both the home graduate program in which they are registered as well as the collaborative specialization.
- Applicants must be admitted to a master's program in one of the collaborating home graduate units before they may apply to the Collaborative Specialization in Global Health (U of T Global Scholar).

Specialization Requirements

- Meet all the degree requirements of the School of Graduate Studies, the home graduate unit, and the Collaborative Specialization in Global Health (U of T Global Scholar).
- Students must successfully complete the global health core course, CHL5700H Global Health (0.5 full-course equivalent [FCE]).
- Depending on the requirements of their core master's programs, collaborative specialization students must complete either a practicum placement, a major research paper, or a master's thesis related to global health.
- Master's students will be encouraged to participate in a series of shared co-curricular global health activities organized by the Dalla Lana School of Public Health and other participating graduate units.
- Students in coursework-only programs in Engineering (MEng) and Public Health (MScCH) must complete an additional 1.0 FCE in approved global health electives. Students in the coursework-only Law program (LLM) must complete an additional 1.5 FCE in approved global health electives.

Core Course

CHL5700H Global Health
Elective Courses

Students in coursework-only master’s programs must take additional global health electives as outlined above. The elective must be approved by the program director of the collaborative specialization.

Global Health (U of T Global Scholar):
Doctoral Level

Admission Requirements

- Applicants must meet the admission requirements of both the home graduate program in which they are registered as well as the collaborative specialization.
- Applicants must be admitted to a doctoral program in one of the collaborating home graduate units before they may apply to the Collaborative Specialization in Global Health (U of T Global Scholar).
- Applicants should have professional, academic, or volunteer experience in global health.

Specialization Requirements

- Meet all the degree requirements of the School of Graduate Studies, the home graduate unit, and the Collaborative Specialization in Global Health (U of T Global Scholar).
- Students must successfully complete:
  - The global health research seminar series CHL5701H (0.5 full-course equivalent [FCE]) over two academic sessions. Students must attend all seminars offered during the two sessions.
  - One of the following courses:
    - 0.5 FCE: CHL5702H, CHL5704H, HAD5768H, NUR1038H, NUR1083H, or
    - 1.0 FCE: JCR1000Y.
  - One elective (0.5 FCE) from outside the home graduate unit, selected in consultation with the collaborative specialization director.
  - A thesis on an issue related to global health, to be approved by both the home unit and the Collaborative Specialization in Global Health Director (U of T Global Scholar).

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL5701H</td>
<td>Doctoral Seminar, Collaborative Specialization in Global Health</td>
</tr>
</tbody>
</table>

Plus one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL5702H</td>
<td>History of International Health</td>
</tr>
<tr>
<td>CHL5704H</td>
<td>International Human Rights Law and Global Health: The Right to Health in Theory and Practice</td>
</tr>
</tbody>
</table>

Elective Courses

Students must take one global health elective from outside of their home graduate unit. The elective must be approved by the collaborative specialization director.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD5768H</td>
<td>International Perspectives on Health Services Management</td>
</tr>
<tr>
<td>JCR1000Y</td>
<td>An Interdisciplinary Approach to Addressing Global Challenges</td>
</tr>
<tr>
<td>NUR1038H</td>
<td>Social Determinants of Health in a Global Context</td>
</tr>
<tr>
<td>NUR1083H</td>
<td>Comparative Politics of Health and Health Policy in a Globalizing World</td>
</tr>
</tbody>
</table>
Health Care, Technology, and Place

Health Care, Technology, and Place: Introduction

Effective September 2015, admissions to this collaborative specialization have closed.

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Biomedical Engineering — PhD
Health Policy, Management and Evaluation — PhD
Mechanical and Industrial Engineering — PhD
Medical Science — PhD
Pharmaceutical Sciences — PhD
Public Health Sciences — PhD
Rehabilitation Sciences — PhD
Social Work — PhD

Overview

The graduate programs listed above participate in the Collaborative Doctoral Specialization in Health Care, Technology, and Place (HCTP). The objectives of this collaborative specialization are to:

- Prepare doctoral students to understand, explain, and improve health outcomes associated with technologically mediated health care.
- Bridge knowledge gaps among doctoral students working in the life sciences, physical sciences, social sciences, and humanities who are concerned with innovative technologies, diverse settings, and complex work and personal practices of modern health in Canada.
- Provide mentorship in interdisciplinary research and scholarship, including leadership skills, negotiation and collaboration, grant writing, and knowledge transfer. Ultimately, the goal is to facilitate research conducted by scientifically informed humanists and philosophically informed physical and social scientists.

Students who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants may apply concurrently to the participating home graduate unit and to the HCTP collaborative specialization. Students follow a course of study acceptable to both the home unit and the HCTP collaborative specialization.

Upon successful completion of the PhD degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Health Care, Technology, and Place” on their transcript.

Contact and Address

Web: [www.hctp.utoronto.ca](http://www.hctp.utoronto.ca)
Email: hctp.program@utoronto.ca
Telephone: (416) 978-2067
Fax: (416) 978-7350

Collaborative Doctoral Specialization in Health Care, Technology, and Place
University of Toronto
Suite 425, 155 College Street
Toronto, Ontario M5T 3M6
Canada

Health Care, Technology, and Place: Doctoral Level

Admission Requirements

- Applicants must apply to a participating graduate unit and comply with the admission procedures of that unit.
- Applicants must forward the following to the HCTP collaborative specialization committee:
  - a copy of the School of Graduate Studies application form submitted to the participating graduate unit;
  - copies of official undergraduate and graduate transcripts from all institutions previously or currently attended, which should reflect a minimum 3.5 GPA (A-);
  - a resumé or curriculum vitae (CV);
  - a research plan (maximum 800 words) summarizing research goals and past research experience, the relevance of the HCTP specialization to this plan, and justification for the identified HCTP project mentor;
  - two confidential letters of recommendation from scholars familiar with the applicant’s research background and aptitude for the interdisciplinary study;
  - a confidential letter from an HCTP mentor providing:
    - formal agreement to participate on the applicant’s dissertation committee;
    - commentary written for reviewers outside the discipline, evaluating the applicant’s level of achievement relative to peers in the same discipline, the objectives and methods of the proposed program of research, and the relative merit of such research within the applicant’s home discipline.

Specialization Requirements

- At least 0.5 full-course equivalent (FCE), selected from the list of core courses.
- Students must attend the monthly seminar series (SRD4444H [CR/NCR]), during their involvement with HCTP.
- Students must participate in at least one Annual Interdisciplinary Research Workshop.
• Completion of a dissertation under the supervision of a core faculty member in the student's home graduate unit. The dissertation must address the theme of health care, technology, and place.
• It is the objective of this collaborative specialization to enrich the PhD experience without unduly extending the duration of students' graduate education. Every student enrolled in the collaborative doctoral specialization must complete the requirements of the collaborative specialization and the requirements of the doctoral program in their home graduate unit. It will be up to each participating home graduate unit to determine whether HCTP courses are completed in addition to the graduate unit's customary course requirements or as a part of those requirements.

Health Care, Technology, and Place: Courses

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNH5001H</td>
<td>Health Care Settings, Sites, and Human Well-Being</td>
</tr>
<tr>
<td>JNH5002H</td>
<td>The Body, Health Care, Technology, and Place</td>
</tr>
<tr>
<td>NUR1031H</td>
<td>Technology and Place in Contemporary Health Care Work</td>
</tr>
</tbody>
</table>
Health Services and Policy Research

Health Services and Policy Research: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Health Policy, Management and Evaluation — MSc, PhD
Kinesiology — MSc, PhD
Pharmaceutical Sciences — MSc, PhD
Public Health Sciences — PhD
Rehabilitation Science — MSc
Social Work — PhD

Overview

The Collaborative Specialization in Health Services and Policy Research began in 2001 as a consortium of six Ontario universities, called the Ontario Training Centre. It was established in a response to the need for increased numbers of health services researchers to address critical issues in effective and efficient health-care delivery (which has been identified as a top priority by national research funding agencies). The Ontario Training Centre was part of a pan-Canadian initiative involving other provincial centres. After its first decade of operations, funding for the centre has concluded. However, the Collaborative Specialization in Health Services and Policy Research continues to attract graduate students from the University of Toronto from a variety of disciplines.

The overall goal of the collaborative specialization is to increase health research capacity in Ontario through an innovative training program that builds on existing strengths in university and decision-making environments.

Partnering with a number of health-care organizations, the Collaborative Specialization in Health Services and Policy Research offers graduate training leading to a Diploma in Health Services and Policy Research.

Specific objectives of the collaborative specialization include:

- providing training in health services research for graduate students;
- enhancing the quality and breadth of transdisciplinary training in health services research; and
- including decision makers as active partners in teaching, program and curriculum planning, and the provision of field placements for students.

This competency-based collaborative specialization focuses on the following five areas:

- understanding the Canadian health-care system;
- ability to carry out health services research;
- understanding theories regarding how the health of populations is produced;
- understanding theories of health and health services knowledge production; and
- knowledge exchange and development of research partnerships.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Health Services and Policy Research” on their transcript.

Contact and Address

Web: ihpme.utoronto.ca/academics/collaborative
Email: whit.berta@utoronto.ca
Telephone: (416) 946-5223
Fax: (416) 978-7350
Collaborative Graduate Specialization in Health Services and Policy Research
c/o Dr. Whitney Berta
Institute of Health Policy, Management and Evaluation
University of Toronto
Suite 428, 4th Floor, 55 College Street
Toronto, Ontario M5T 3M6
Canada

Health Services and Policy Research: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Master's students are admitted under the General Regulations of the School of Graduate Studies and the specific criteria of the participating unit.
- An overall B+ average in the last two years of an appropriate bachelor’s degree from a recognized university.
- An interest in health services and policy research outlined in an autobiographical letter including the applicant's reasons for becoming a health services or policy researcher.

Specialization Requirements

Students must meet all respective degree requirements of the School of Graduate Studies and the participating graduate unit.
Health Services and Policy Research:
Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Doctoral students are admitted under the General Regulations of the School of Graduate Studies and the specific criteria of the participating unit.
- Applicants are required to:
  - demonstrate academic excellence in completed courses (B+ average in graduate courses), scholarships and academic awards received;
  - demonstrate aptitude for health services and policy research (letter of recommendation from a previous professor or thesis supervisor, commenting on the applicant's academic abilities and likelihood for success as a health services researcher);
  - outline career plans (in an autobiographical letter including their reasons for becoming a health services researcher and their career plans); and
  - propose a plan of study in the collaborative specialization.
- Students who complete the collaborative specialization at the master's level are not eligible to participate at the PhD level.

Specialization Requirements

Students must meet all respective degree requirements of the School of Graduate Studies and the participating graduate unit.

- Coursework. Students must complete a total of 1.5 full-course equivalents (FCEs) as follows:
  - HSR1000H Research and/or Policy Practicum
  - HSR1002H Health Services Research Seminar (Credit/No Credit)
  - 0.5 FCE from the elective course list.
- Students are required to write a thesis under the supervision of a core faculty member of the collaborative specialization. The thesis must address the theme of health services and policy research.

<table>
<thead>
<tr>
<th>Electives</th>
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</thead>
<tbody>
<tr>
<td>HAD5011H</td>
</tr>
<tr>
<td>HAD5727H</td>
</tr>
<tr>
<td>HAD5728H</td>
</tr>
<tr>
<td>HAD5780H</td>
</tr>
<tr>
<td>HAD7001H</td>
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<tr>
<td>HSR1001H</td>
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</tbody>
</table>

Health Services and Policy Research:
Courses

Required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSR1000H</td>
<td>Research and/or Policy Practicum</td>
</tr>
<tr>
<td>HSR1002H</td>
<td>Health Services Research Seminar (Credit/No Credit)</td>
</tr>
</tbody>
</table>
Indigenous Health

Indigenous Health: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Anthropology — MA, MSc, PhD
Counselling and Clinical Psychology — MA, PhD
Counselling Psychology — MEd, EdD
Geography — MA, PhD
Medical Science — MSc, PhD
Nutritional Sciences — MSc, PhD
Public Health Sciences — MPH, PhD
Social Justice Education — MA, MEd, EdD, PhD

Supporting Units

Indigenous Studies program (undergraduate), Faculty of Arts and Science

Overview

The Collaborative Specialization in Indigenous Health (CSIH) is situated in the Dalla Lana School of Public Health at the Waakebiness-Bryce Institute for Indigenous Health (WBIIH). The main objective is to provide training in Indigenous health research and practice for graduate students across U of T, while enhancing mutually beneficial and authentic relationships with Indigenous peoples, communities, and organizations.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Indigenous Health" on their transcript.

Contact and Address

Web: www.dlsph.utoronto.ca/institutes/wbihih/collaborative-specialization-in-indigenous-health
Email: wbihih.dlsph@utoronto.ca
Telephone: (416) 978-8502
Fax: (416) 978-1883

Collaborative Specialization in Indigenous Health
c/o Waakebiness-Bryce Institute for Indigenous Health (WBIIH)
University of Toronto
155 College Street, 4th Floor
Toronto, Ontario M5T 3M7
Canada

Indigenous Health: Master's Level

Admission Requirements

- Applicants who wish to enrol in a collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must submit a completed Collaborative Specialization in Indigenous Health (CSIH) application form to the CSIH committee.

Specialization Requirements

- All master's students in the collaborative specialization will take the core course CHL5520H Indigenous Health (0.5 full-course equivalent [FCE]) that runs in August annually.
- In home graduate units where a thesis or major research paper is required, it must deal with an Indigenous health topic. At least one member of the student's thesis committee must be a core faculty member of the collaborative specialization.
- In home graduate units where students undertake a practicum or equivalent, it must focus on an Indigenous health topic and be supervised by a core faculty member of the collaborative specialization.
- Students in coursework-only programs must complete additional coursework in approved Indigenous health electives. For the MEd in Adult Education and Community Development and the MEd in Social Justice Education (Coursework Only Option), 1.0 FCE in additional courses in Indigenous Health are required.
- Students must participate in at least 80% of the Research Seminar Series, held monthly, as well as participate in at least one Indigenous land-based activity.
- Students must complete the requirements of the collaborative specialization in addition to those requirements for the degree program in their home graduate unit.

Indigenous Health: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in a collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must submit a completed Collaborative Specialization in Indigenous Health (CSIH) application form to the CSIH committee.

Specialization Requirements

- The requirements are the same as for the master's program listed above.
• Students who have previously taken the core course CHL5520H *Indigenous Health* during their master's program are required to take a different course, approved by the collaborative specialization director, during their doctoral program.

• Students participate in at least 80% of a new Research Seminar Series held monthly and at least one Indigenous land-based activity.

**Indigenous Health: Courses**

**Core Course**

CHL5520H Indigenous Health
Jewish Studies

Jewish Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Anthropology — MA, PhD
Art History — MA, PhD
Classics — MA, PhD
Comparative Literature — MA, PhD
Drama, Theatre and Performance Studies — MA, PhD
English — MA, PhD
European and Russian Affairs — MA
Geography — PhD
Germanic Languages and Literatures — MA
Germanic Literature, Culture and Theory — PhD
History — MA, PhD
Information — PhD
Law — LLM, MSL, SJD
Linguistics — PhD
Medieval Studies — MA, PhD
Museum Studies — MMSt
Music — MA, PhD
Music Performance — DMA
Near and Middle Eastern Civilizations — MA, PhD
Philosophy — MA, PhD
Political Science — MA, PhD
Religion — MA, PhD
Slavic Languages and Literatures — MA, PhD
Sociology — MA, PhD
Women and Gender Studies — MA

Overview

The Collaborative Specialization in Jewish Studies offers both broad and intensive exposure to the constituent fields within Jewish Studies. Because of Jewish civilization’s vast chronological and geographical range, as well as its constant interaction and cross-fertilization with other cultures, graduate work within Jewish Studies demands intensive exposure to a wide variety of languages, textual traditions, and scholarly disciplines.

The collaborative specialization involves the graduate master’s and doctoral programs listed above. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Jewish Studies” on their transcript.

Jewish Studies: Master's Level

Admission Requirements

- In addition to the admission requirements of the home graduate unit, sufficient linguistic knowledge, textual training, and familiarity with relevant scholarship in order to carry out graduate work in Jewish Studies within the chosen field are required.

Specialization Requirements

- Completion of CJS1000H, the core methods seminar in Jewish Studies. This seminar will introduce students to the different disciplines, methods, and approaches within Jewish Studies.
- 0.5 full-course equivalent (FCE) in Jewish Studies taken within the student’s home graduate unit or in another unit (may count towards the course requirements of the student’s home unit).
- A comprehensive exam in Jewish Studies, supervised by a faculty member chosen from Jewish Studies and in consultation with the graduate chair from the student’s home unit, in which the student will be asked to show knowledge of areas of Jewish Studies relevant to his or her disciplinary focus.
- If the student’s home program requires a major research paper or thesis, the focus of the paper must pertain to Jewish Studies, and the topic must be approved by the collaborative specialization director.

Jewish Studies: Doctoral Level

Admission Requirements

- In addition to the admission requirements of the home graduate unit, sufficient linguistic knowledge, textual training, and familiarity with relevant scholarship in order to carry out graduate work in Jewish Studies within the chosen field are required.

Specialization Requirements

- Completion of CJS2000H, the core research colloquium in Jewish Studies that runs biweekly throughout the year.
• Two half courses (1.0 full-course equivalent [FCE]), one within and one outside of the student’s home unit, taught by a member of the CJS faculty (may count towards the course requirements of the student’s home unit).
• A doctoral dissertation that deals substantively with topics in Jewish Studies and is supervised or co-supervised by a Jewish Studies graduate faculty member.
• Students will be required to give one presentation at the Jewish Studies graduate student conference over the course of their doctoral program. The conference will be held each year in the spring. The paper presentation must be completed before the completion of the doctoral program.

Jewish Studies: Courses

Not all courses are offered every year. Please consult the graduate unit for information about course availability. Courses marked with # are taught by Jewish Studies faculty members and incorporate themes within and outside of Jewish Studies. Major research and writing assignments for such courses must focus on topics in Jewish Studies.

Core Courses

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJS1000H (Jewish Studies Master’s Seminar)</td>
<td></td>
</tr>
<tr>
<td>CJS2000H (Jewish Studies Doctoral Seminar)</td>
<td></td>
</tr>
</tbody>
</table>

Elective Courses

History

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS1279H (World War II in East Central Europe)</td>
<td></td>
</tr>
<tr>
<td>HIS1287H (Polish Jews Since the Partitions of Poland)</td>
<td></td>
</tr>
</tbody>
</table>

Medieval Studies

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MST3225H# (Jews and Christians in Medieval and Renaissance Europe)</td>
<td></td>
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</table>

Music

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJS1010H (Representations of Jews and Jewishness in Opera)</td>
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</table>

Near and Middle Eastern Civilizations

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMC1100Y# (Introduction to Aramaic)</td>
<td></td>
</tr>
<tr>
<td>NMC1101Y# (Early Syriac Texts)</td>
<td></td>
</tr>
<tr>
<td>NMC1102Y (Palestinian Aramaic Texts)</td>
<td></td>
</tr>
</tbody>
</table>

Philosophy

Various courses, depending upon their content in a given year. Consult the collaborative specialization director.

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PHL2084H# (Seminar in Nineteenth-Century Continental Philosophy)</td>
<td></td>
</tr>
<tr>
<td>PHL2089H# (Seminar in Twentieth-Century Continental Philosophy)</td>
<td></td>
</tr>
<tr>
<td>PHL2090H (Hermeneutics)</td>
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</tbody>
</table>

Political Science

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL2021Y# (Comparative Studies in Jewish and Non-Jewish Political Thought)</td>
<td></td>
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</tbody>
</table>

Religion

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLG3611H (Hebrew Literature and Religion: Midrash Aggadah)</td>
<td></td>
</tr>
<tr>
<td>RLG3621H (Modern Jewish Thought)</td>
<td></td>
</tr>
<tr>
<td>RLG3622H (Maimonides and His Modern Interpreters)</td>
<td></td>
</tr>
<tr>
<td>RLG3634H# (Worship and Scripture at Qumran)</td>
<td></td>
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<tr>
<td>RLG3641H (Interpretations of Jewish Tradition)</td>
<td></td>
</tr>
<tr>
<td>RLG3645Y (The Jewish Legal Tradition)</td>
<td></td>
</tr>
<tr>
<td>RLG3647H (Early Rabbinic Judaism)</td>
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</tbody>
</table>

Slavic Languages and Literatures

<table>
<thead>
<tr>
<th>Course Code (Course Name)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLA1207H (The Imaginary Jew)</td>
<td></td>
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</tbody>
</table>
Knowledge Media Design

Knowledge Media Design: Introduction

Lead Faculty of the Collaborative Specialization

Information

Participating Degree Programs

Architecture — MArch
Computer Science — MSc, PhD
Curriculum and Pedagogy — MA, MEd, PhD
Drama, Theatre and Performance Studies — MA, PhD
Information — MI, PhD
Landscape Architecture — MLA
Language and Literacies Education — MA, MEd, PhD
Mechanical and Industrial Engineering — MASc, MEng, PhD
Medical Science — MSc, PhD
Museum Studies — MMSt
Religion — MA, PhD
Urban Design — MUD

Overview

The Collaborative Specialization in Knowledge Media Design (KMD) was launched in 2002 as the teaching arm of the Knowledge Media Design Institute (KMDI). KMD provides a specialization for graduate students from a variety of academic backgrounds to engage in the design, prototyping, evaluation, and use of knowledge media. In keeping with KMDI’s human-centred approach, students explore the design and use of new media in the context of real-world practices of individuals and communities. Access to an intensely collaborative and cross-disciplinary faculty encourages students to take a broader view of technological and social change and to be constructively critical of technological utopian and dystopian visions alike. The goal is for students to take into account heritage and history, to understand the realities of today, and to design for tomorrow.

Students have access to a community of scholars and the network of relationships that the institute coordinates. They gain first-hand experience of a living network of innovation, an environment in which the resources are people and knowledge, and the social capital and value that are generated through collaboration.

The collaborative specialization is open to master's and PhD students in the participating graduate programs listed above. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Knowledge Media Design" on their transcript.

Contact and Address

Web: kmdi.utoronto.ca
Email: admin.kmdi@utoronto.ca
Telephone: (416) 978-5634

Collaborative Specialization in Knowledge Media Design
Knowledge Media Design Institute, University of Toronto
Faculty of Information
John P. Robarts Library Building, 7023A
130 St. George Street
Toronto, Ontario M5S 1A5
Canada

Mailing address:
Faculty of Information
Knowledge Media Design Institute
University of Toronto
140 St. George Street
Toronto, ON M5S 3G6
Canada

Knowledge Media Design: Master's Level

Admission Requirements

- Students wanting to apply to the collaborative specialization must be enrolled, or anticipate being enrolled, in a participating degree program. They must apply separately to the collaborative specialization and the home graduate unit.
- Please consult the KMDI website for application guidelines. Admission will be subject to the approval of the graduate unit concerned and the collaborative specialization committee.

Specialization Requirements

Master of Architecture;
MSc in Computer Science;
MA in Curriculum and Pedagogy;
MA in Drama, Theatre and Performance Studies;
Mechanical and Industrial Engineering (MASc; MEng Project Option);
Master of Landscape Architecture,
MA in Language and Literacies Education;
Master of Museum Studies;
MSc in Medical Science;
MA in Religion;
Master of Urban Design

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of 1.0 full-course equivalent (FCE):
  - KMD1001H (0.5 FCE);
Specialization Requirements

MEd in Curriculum Studies and Teacher Development; MEd in Language and Literacies Education; MEng in Mechanical and Industrial Engineering (Coursework-Only Option)

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of 1.5 full-course equivalents (FCEs):
  - KMD1001H (0.5 FCE);
  - 1.0 elective FCE related to knowledge media and design. Courses are subject to availability.
- Students must attend two KMDI Speaker Series Lectures during one academic year of their degree program. Attendance will be monitored and appear on the transcript as KMD2100Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student coursework in knowledge media design. The collaborative specialization committee will review all portfolios for their quality and contribution to the area of knowledge media design. Students’ thesis will be a component of their portfolios.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Knowledge Media Design: Doctoral Level

Admission Requirements

- Students wanting to apply to the collaborative specialization must be enrolled, or anticipate being enrolled, in a participating degree program. They must apply separately to the collaborative specialization and the home graduate unit.
- Please consult the KMDI website for application guidelines. Admission will be subject to the approval of the graduate unit concerned and the collaborative specialization committee.

Specialization Requirements

Master of Information (Coursework-Only Option)

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of 2.5 full-course equivalents (FCEs):
  - KMD1001H (0.5 FCE);
  - 2.0 elective FCEs related to knowledge media and design. Courses are subject to availability.
- Students must attend two KMDI Speaker Series Lectures during one academic year of their degree program.

Specialization Requirements

Master of Information (Thesis Option)

- Students must meet all the requirements of their home program.
- Students must successfully complete a total of 1.0 full-course equivalent (FCE):
  - KMD1001H (0.5 FCE);
  - 0.5 elective FCE related to knowledge media and design. Courses are subject to availability.
- Students must attend two KMDI Speaker Series Lectures during one academic year of their degree program. Attendance will be monitored and appear on the transcript as KMD2100Y (Credit/No Credit).
- Students must submit a portfolio that includes completed student coursework in knowledge media design. The collaborative specialization committee will review all portfolios for their quality and contribution to the area of knowledge media design.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

Specialization Requirements

Master of Information (Thesis Option)

- Students must meet all the requirements of their home program.
Students must successfully complete a total of 1.5 full-course equivalents (FCEs):
- KMD1001H and KMD1002H if not already taken in the master's program, and
- 0.5 FCE from the KMD series or a list of recognized affiliate courses.

Students must attend four KMDI Speaker Series Lectures during one academic year of their degree program. Attendance will be monitored and appear on the transcript as KMD2200Y (Credit/No Credit).

Students must submit a portfolio that includes completed coursework and research in knowledge media design. The collaborative specialization committee will review all portfolios for their quality and contribution to the area of knowledge media design. Students' portfolios will most often be connected with one or more chapters of their dissertation.

The dissertation topic must be in the area of knowledge media design. The thesis advisor and at least one other committee member must be from participating graduate units.

The home graduate unit and the student's supervising committee will determine further requirements. The participating graduate units cooperate in jointly developing a program that is tailored to meet the needs of each student.

### Knowledge Media Design: Courses

For courses offered in a particular year, check the KMD website.

#### Knowledge Media Design

##### Required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMD1001H</td>
<td>Theory and Methods in Knowledge Media Design (Required for master's and PhD students.)</td>
</tr>
<tr>
<td>KMD1002H</td>
<td>Applications in Knowledge Media (Credit/No Credit. Required for PhD students only; elective for master's students. Offered once every two years.)</td>
</tr>
<tr>
<td>KMD2100Y</td>
<td>Master's Seminar (Credit/No Credit)</td>
</tr>
<tr>
<td>KMD2200Y</td>
<td>Doctoral Seminar (Credit/No Credit)</td>
</tr>
</tbody>
</table>

##### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMD2002H</td>
<td>Technologies for Knowledge Media</td>
</tr>
<tr>
<td>KMD3000H</td>
<td>Readings in Knowledge Media Design</td>
</tr>
<tr>
<td>KMD3001H</td>
<td>Readings in Knowledge Media Design</td>
</tr>
<tr>
<td>KMD4000H</td>
<td>Knowledge Media Design: Special Topics (Prerequisite: KMD1001H.)</td>
</tr>
</tbody>
</table>

### Participating Graduate Unit Electives

Not all courses are offered every year. Please consult the KMD website for a full list of eligible electives that meet the KMD collaborative specialization requirements. Courses that are mandatory for a student's degree from the home graduate unit cannot normally be counted. Some of the elective courses may require a significant amount of background knowledge and experience. Enrolment in such courses may require the permission of the instructor.

#### Architecture; Landscape Architecture; Urban Design; Visual Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN1021H</td>
<td>Visual Communication 1</td>
</tr>
<tr>
<td>LAN1022H</td>
<td>Visual Communication 2</td>
</tr>
<tr>
<td>LAN1031H</td>
<td>History, Theory, Criticism 1</td>
</tr>
<tr>
<td>LAN1032H</td>
<td>History, Theory, Criticism 2</td>
</tr>
<tr>
<td>URD1031H</td>
<td>The History of Toronto Urban Form</td>
</tr>
<tr>
<td>URD1041H</td>
<td>Introduction to Urban Design Theory</td>
</tr>
<tr>
<td>VIS1010H</td>
<td>Contemporary Art Since 1960</td>
</tr>
<tr>
<td>VIS1020H</td>
<td>Contemporary Art: Theory and Criticism</td>
</tr>
<tr>
<td>VIS1101H</td>
<td>Paradigmatic Exhibitions: History, Theory, Criticism</td>
</tr>
</tbody>
</table>

#### Computer Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC2514H</td>
<td>Human-Computer Interaction</td>
</tr>
<tr>
<td>CSC2526H</td>
<td>HCI: Topics in Ubiquitous Computing</td>
</tr>
<tr>
<td>CSC2537H</td>
<td>Information Visualization</td>
</tr>
<tr>
<td>CSC2552H</td>
<td>Topics in Computational Social Science</td>
</tr>
<tr>
<td>CSC2556H</td>
<td>Algorithms for Collective Decision Making</td>
</tr>
<tr>
<td>CSC2720H</td>
<td>Systems Thinking for Global Problems</td>
</tr>
</tbody>
</table>

#### Curriculum and Pedagogy; Language and Literacies Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL1602H</td>
<td>Introduction to Computers in Education</td>
</tr>
<tr>
<td>CTL1608H</td>
<td>Constructive Learning and Design of Online Environments</td>
</tr>
<tr>
<td>CTL1609H</td>
<td>Educational Applications of Computer-Mediated Communication</td>
</tr>
<tr>
<td>CTL1617H</td>
<td>Social Media and Education</td>
</tr>
<tr>
<td>CTL1926H</td>
<td>Knowledge Media and Learning</td>
</tr>
</tbody>
</table>
### Drama, Theatre and Performance Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRA3904H</td>
<td>Topics in Theatre, Drama, and Performance</td>
</tr>
<tr>
<td>DRA3908H</td>
<td>Topics in Theatre, Drama, and Performance</td>
</tr>
</tbody>
</table>

### Information

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INF1602H</td>
<td>Fundamentals of User Experience</td>
</tr>
<tr>
<td>INF2122H</td>
<td>Digital Preservation and Curation</td>
</tr>
<tr>
<td>INF2169H</td>
<td>User-Centred Information Systems Development</td>
</tr>
<tr>
<td>INF2170H</td>
<td>Information Architecture</td>
</tr>
<tr>
<td>INF2191H</td>
<td>User Interface Design</td>
</tr>
<tr>
<td>INF2192H</td>
<td>Representing UX</td>
</tr>
<tr>
<td>INF2197H</td>
<td>Special Topics in Information</td>
</tr>
<tr>
<td></td>
<td>(Topics may vary each year and may not be</td>
</tr>
<tr>
<td></td>
<td>applicable.)</td>
</tr>
<tr>
<td>INF2241H</td>
<td>Critical Making: Information Studies, Social</td>
</tr>
<tr>
<td></td>
<td>Values, and Physical Computing</td>
</tr>
<tr>
<td>INF2242H</td>
<td>Studying Information and Knowledge Practice</td>
</tr>
<tr>
<td>INF2243H</td>
<td>Critical Histories of Information and</td>
</tr>
<tr>
<td></td>
<td>Communication Technologies</td>
</tr>
<tr>
<td>INF2300H</td>
<td>Special Topics in Information</td>
</tr>
<tr>
<td></td>
<td>(Topics may vary each year and may not be</td>
</tr>
<tr>
<td></td>
<td>applicable.)</td>
</tr>
<tr>
<td>INF2303H</td>
<td>Special Topics in Information</td>
</tr>
<tr>
<td></td>
<td>(Topics may vary each year and may not be</td>
</tr>
<tr>
<td></td>
<td>applicable.)</td>
</tr>
<tr>
<td>INF2306H</td>
<td>Special Topics in Information</td>
</tr>
<tr>
<td></td>
<td>(Topics may vary each year and may not be</td>
</tr>
<tr>
<td></td>
<td>applicable.)</td>
</tr>
<tr>
<td>INF2320H</td>
<td>Remix Culture</td>
</tr>
<tr>
<td>INF2330H</td>
<td>Information Ethnography</td>
</tr>
<tr>
<td>INF2331H</td>
<td>The Future of the Book</td>
</tr>
</tbody>
</table>

### Religion

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLG2023H</td>
<td>Religion, Media, and Culture</td>
</tr>
</tbody>
</table>

### Mechanical and Industrial Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIE1401H</td>
<td>Human Factors Engineering</td>
</tr>
<tr>
<td>MIE1402H</td>
<td>Experimental Methods in Human Factors Research</td>
</tr>
</tbody>
</table>

### Museum Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL2000H</td>
<td>Curatorial Practice</td>
</tr>
<tr>
<td>MSL2325H</td>
<td>Museums and New Media Practice</td>
</tr>
<tr>
<td>MSL2330H</td>
<td>Interpretation and Meaning Making in Museums</td>
</tr>
</tbody>
</table>
Mediterranean Archaeology

Mediterranean Archaeology: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Anthropology — PhD
Art History — PhD
Classics — PhD
Near and Middle Eastern Civilizations — PhD
Religion — PhD

Supporting Units

Archaeology Centre

Overview

The Mediterranean Archaeology Collaborative Specialization (MACS) will expose students to the range of current approaches on the cutting-edge of Mediterranean archaeology. The Mediterranean offers unrivalled opportunities for exploring the complexities of economic, social, political, and religious change over centuries and millennia, across a vast area that is at once a coherent unit and a region with incredible diversity.

Students will be trained in the various methods required to undertake innovative research in the Mediterranean’s varied prehistoric and historic contexts. Upon successful completion of the PhD requirements of the home graduate unit and the collaborative specialization, students will receive the notation “Completed Mediterranean Archaeology Collaborative Specialization” on their transcript.

Contact and Address

Web: macs.utoronto.ca
Email: archaeology@utoronto.ca
Telephone: (416) 978-5248
Fax: (416) 978-3217

Mediterranean Archaeology Collaborative Specialization
Archaeology Centre, University of Toronto
19 Russell Street
Toronto, Ontario M5S 2S2
Canada

Mediterranean Archaeology: Doctoral Level

Admission Requirements

- Applicants to the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants must meet the admission requirements of the graduate unit in which they intend to enrol. Admission will be subject to the approval of the graduate unit concerned and the collaborative specialization committee.

- Students requesting admission to the collaborative specialization following admission to a degree program should contact the specialization committee in order to formalize their admission to MACS.

Specialization Requirements

- **Coursework.** Students must complete 1.0 full-course equivalent (FCE): MAC1000Y *Methods in Mediterranean Archaeology.*

- **Fieldwork** (MAC2000H) four weeks of participation on an approved archaeological excavation, survey, or study season in the Mediterranean.

- **Thesis.** The topic must be in the area of Mediterranean archaeology, ancient history, or classical archaeology.

Mediterranean Archaeology: Courses

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC1000Y</td>
<td>Methods in Mediterranean Archaeology</td>
</tr>
<tr>
<td>MAC2000H</td>
<td>Mediterranean Archaeology Fieldwork (Credit/No Credit)</td>
</tr>
</tbody>
</table>
Musculoskeletal Sciences

Musculoskeletal Sciences: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Biomedical Engineering — MASc, PhD
Dentistry — MSc, PhD
Kinesiology — MSc, PhD
Laboratory Medicine and Pathobiology — MSc, PhD
Medical Science — MSc, PhD
Pharmacology and Toxicology — MSc, PhD
Rehabilitation Science — MSc, PhD

Overview

There is an increasing burden of illness related to musculoskeletal disorders. The Collaborative Specialization in Musculoskeletal Sciences focuses on educating and training graduate students to carry out musculoskeletal research and helping them see how their work fits into the larger community of musculoskeletal research that ranges from bench to bedside to society.

The collaborative specialization nurtures leaders in the field of musculoskeletal sciences who possess the knowledge and capability to promote transformational change.

The University of Toronto has a cohort of stellar faculty with expertise in all related medical research disciplines, constituting one of the largest musculoskeletal research communities in the world. Research areas include immunology, cell biology, molecular medicine and genomics, muscle physiology, imaging, pathology, bioengineering, and related clinical areas such as orthopaedics, rheumatology, dentistry, kinesiology, rehabilitation, injury prevention, and pain management.

Advances in these areas are converging to allow major advances in translating research to musculoskeletal care and health. This collaborative specialization builds on this community to provide a unique education and training program.

Musculoskeletal Sciences interests graduate students wishing to enhance their interdisciplinary knowledge and advance their careers. Participation in this collaborative specialization enhances professional contacts throughout the international musculoskeletal research community. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Musculoskeletal Sciences” on their transcript.

Musculoskeletal Sciences: Master’s Level

Admission Requirements

• Applicants who wish to enrol in Musculoskeletal Sciences must apply to and be admitted to both a graduate degree program in one of the participating units and to the collaborative specialization. In addition to the application requirements of the home degree program, the collaborative specialization requires:
  o a curriculum vitae (CV)
  o a one-page letter explaining how the applicant's plan of study and specific research interests relate to musculoskeletal science
  o a letter of recommendation from a faculty member (if possible the thesis supervisor in a thesis-based graduate program), commenting on the applicant's academic abilities and likelihood for research success.

Specialization Requirements

• Meet all requirements of the home degree program and the collaborative specialization.
• Complete the required core course: MSC3001H Foundations In Musculoskeletal Science.
• Attend and participate in 12 seminars of the SRM3335H+ Master’s Seminar Series — Compulsory Attendance (Credit/No Credit).
• Complete a thesis or major project or placement in the area of musculoskeletal sciences under the supervision of a collaborative specialization core faculty member.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

Musculoskeletal Sciences: Doctoral Level

Students enrolled in the collaborative specialization at the master's level who transfer to the doctoral level will have the course MSC3001H Foundations in Musculoskeletal Science counted toward the completion of the doctoral collaborative specialization requirements.
Admission Requirements

- Applicants who wish to enrol in Musculoskeletal Sciences must apply to and be admitted to both a graduate degree program in one of the collaborating units and to the collaborative specialization. In addition to the application requirements of the home degree program, the collaborative specialization requires:
  - a curriculum vitae (CV)
  - one-page letter explaining how the applicant's plan of study and specific research interests relate to musculoskeletal science
  - a letter of recommendation from a faculty member (usually the thesis supervisor in a thesis-based graduate program), commenting on the applicant's academic abilities and likelihood for research success at the doctoral level.

Specialization Requirements

- Meet all requirements of the home degree program and collaborative specialization.
- Complete the required core course: MSC3001H *Foundations in Musculoskeletal Science*. Students who have completed MSC3001H at the master's level and who transfer to a doctoral degree and the doctoral level of the collaborative specialization are not required to complete an additional core course.
- Attend and participate in 18 seminars of the SRD4445H *Doctoral Seminar Series*. Students who transfer from a master's degree and master's collaborative specialization to a doctoral degree and the doctoral collaborative specialization will be required to attend 18 seminars in total; the total will include the number of seminars attended at both the master's and doctoral levels.
- Complete a thesis in the area of musculoskeletal sciences under the supervision of a collaborative specialization core faculty member.
- In the rare instance that a student who has completed the collaborative specialization at the master's level wishes to also enrol in the collaborative specialization at the doctoral level, the student will not be required to repeat the core course, MSC3001H. However, the student will be required to attend and participate in 18 seminars of the SRD4445H *Doctoral Seminar Series* and complete the doctoral thesis in the area under the supervision of a core faculty member.

Musculoskeletal Sciences: Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC3001H</td>
<td>Foundations in Musculoskeletal Science</td>
</tr>
<tr>
<td>SRM3335H*</td>
<td>Master’s Seminar Series — Compulsory Attendance</td>
</tr>
<tr>
<td>SRD4445H*</td>
<td>Doctoral Seminar Series — Compulsory Attendance</td>
</tr>
</tbody>
</table>

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*
Neuroscience

Neuroscience: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

- Biochemistry — MSc, PhD
- Bioethics — MHSc
- Biomedical Engineering — MASc, PhD
- Cell and Systems Biology — MSc, PhD
- Clinical Engineering — MSc
- Community Health — MScCH
- Computer Science — MSc, PhD
- Dentistry — MSc, PhD
- Developmental Psychology and Education — MA, PhD
- Laboratory Medicine and Pathobiology — MSc, PhD
- Medical Biophysics — MSc, PhD
- Medical Science — MSc, PhD
- Music — MA, PhD
- Pharmaceutical Sciences — MSc, PhD
- Pharmacology — MSc, PhD
- Physiology — MSc, PhD
- Psychology — MA, PhD
- Public Health Sciences — MPH, MSc, PhD
- Rehabilitation Science — MSc, PhD
- Speech-Language Pathology — MSc, PhD

Overview

The graduate programs listed above participate in the Collaborative Specialization in Neuroscience.

Participating graduate units contribute courses and provide facilities and supervision for graduate research. Students must follow a plan of studies acceptable to both the participating unit and the Neuroscience collaborative specialization. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Neuroscience” on their transcript.

Students interested in joining the specialization should visit the Neuroscience website and complete the application form. Students should register within one month of initial registration in their participating degree unit. The Neuroscience website provides areas of research for all faculty in the collaborative specialization, their graduate unit affiliations and contact information, as well as additional information on neuroscience courses.

Students in the specialization receive the Neuroscience newsletter and notification about neuroscience lectures held on campus. The collaborative specialization runs a Distinguished Lectureship Series of talks by eminent neuroscientists and an annual research day; students are required to attend and present at this event.

Contact and Address

Web: www.neuroscience.utoronto.ca
Email: p.neuroscience@utoronto.ca
Telephone: (416) 978-8637

Collaborative Specialization in Neuroscience
University of Toronto
Room 3306, 1 King's College Circle
Toronto, ON M5S 1A8
Canada

Neuroscience: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating units.

Specialization Requirements

- The thesis topic must be in the neuroscience area.
- The student’s supervisor must be a core faculty member of the Collaborative Specialization in Neuroscience.
- All master’s-level students must complete at least 0.5 full-course equivalent (FCE) chosen from the list of courses approved by the collaborative specialization, as listed below.
- The student must attend the Annual Collaborative Specialization in Neuroscience Research Day at least once.
- The student must complete NEU1000H Neuroscience Distinguished Lecture Series (Master’s) by attending at least 70% of the lectures in the CPIN Distinguished Lectureship Series (including the Raymond and Beverly Sackler Distinguished Visiting Neuroscientist Lecture) or CPIN Emerging Leaders in Neuroscience Lecture Series, during one academic year (or a minimum of seven lectures in total over the program). As part of the seminar series, the student must present his/her work at least once at the CPIN Research Day.

Neuroscience: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating units.
Specialization Requirements

- The thesis topic must be in the neuroscience area.
- The student's supervisor must be a core faculty member of the Collaborative Specialization in Neuroscience.
- All PhD students must complete at least 1.0 full-course equivalent (FCE) course, such as JNR1444Y Fundamentals of Neuroscience: Cellular and Molecular, or JNS1000Y Fundamentals of Neuroscience: Systems and Behaviour, or one of several additional courses in cognitive psychology or imaging, or neuroscience-related course to be determined by the collaborative specialization committee and posted on the Neuroscience website in July of each year.
- The student must attend the Annual Collaborative Specialization in Neuroscience Research Day at least twice.
- The student must complete NEU2000H Neuroscience Distinguished Lecture Series (Doctoral) by attending at least 70% of the lectures in the CPIN Distinguished Lectureship Series (including the Raymond and Beverly Sackler Distinguished Visiting Neuroscientist Lecture) or CPIN Emerging Leaders in Neuroscience Lecture Series, during three academic years (or a minimum of 21 lectures in total over the program). As part of the seminar series, the student must present his/her work at least twice at the CPIN Research Day.
- MSc or MA students who have completed the Neuroscience specialization and who wish to continue on to complete at the doctoral level must register in NEU2000H Neuroscience Distinguished Lecture Series (Doctoral) and fulfil the doctoral requirements.

Neuroscience: Courses

Neuroscience courses offered by the participating units are listed below. Not all courses are offered each year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APD3286H</td>
<td>Developmental Neurobiology</td>
</tr>
<tr>
<td>APD5000H</td>
<td>Special Topics in Applied Psychology and Human Development: Master's Level</td>
</tr>
<tr>
<td>CSC2506H</td>
<td>Probabilistic Learning and Reasoning</td>
</tr>
<tr>
<td>CSC2515H</td>
<td>Introduction to Machine Learning</td>
</tr>
<tr>
<td>CSC2523H</td>
<td>Object Modelling and Recognition</td>
</tr>
<tr>
<td>CSC2545H</td>
<td>Kernel Methods and Support Vector Machines</td>
</tr>
<tr>
<td>DEN1060H</td>
<td>Oral Physiology: Sensory and Neuromuscular Function</td>
</tr>
<tr>
<td>JEB1444H</td>
<td>Neural Engineering</td>
</tr>
<tr>
<td>JNP1017H+</td>
<td>Current Topics in Molecular and Biochemical Toxicology</td>
</tr>
<tr>
<td>JNP1018H+</td>
<td>Molecular and Biochemical Basis of Toxicology</td>
</tr>
<tr>
<td>JNR1444Y</td>
<td>Fundamentals of Neuroscience: Cellular and Molecular — Lectures</td>
</tr>
<tr>
<td>JNS1000Y</td>
<td>Fundamentals of Neuroscience: Systems and Behaviour</td>
</tr>
<tr>
<td>JPB1071H</td>
<td>Advanced Topics: Computational Neuroscience</td>
</tr>
<tr>
<td>JPM1005Y</td>
<td>Behavioural Pharmacology</td>
</tr>
<tr>
<td>JYG1555H</td>
<td>Advanced Topics: Cellular and Molecular Neurobiology</td>
</tr>
<tr>
<td>LMP2222H</td>
<td>Neurodegenerative Disease — Mechanisms, Models, and Methods</td>
</tr>
<tr>
<td>MSC1006H</td>
<td>Neuroanatomy</td>
</tr>
<tr>
<td>MSC1081H</td>
<td>Studies in Schizophrenia</td>
</tr>
<tr>
<td>MSC1085H</td>
<td>Molecular Approaches to Mental Health and Addictions</td>
</tr>
<tr>
<td>MSC1087H</td>
<td>Neuroimaging Methods Using Magnetic Resonance Imaging</td>
</tr>
<tr>
<td>MSC1088H</td>
<td>Brain Positron Emission Tomography</td>
</tr>
<tr>
<td>MSC6000H</td>
<td>Special Topics Reading Course (requires prior permission of the Neuroscience Program Director)</td>
</tr>
<tr>
<td>MUS7110H</td>
<td>Neurosciences of Music: Scientific Foundations, Clinical Translations</td>
</tr>
<tr>
<td>NEU1000H⁰</td>
<td>Neuroscience Distinguished Lecture Series (Master's) (Credit/No Credit)</td>
</tr>
<tr>
<td>NEU2000H⁰</td>
<td>Neuroscience Distinguished Lecture Series (Doctoral) (Credit/No Credit)</td>
</tr>
<tr>
<td>PSL1024H</td>
<td>Advanced Topics: Neuroendocrinology</td>
</tr>
<tr>
<td>PSL1026H</td>
<td>Advanced Topics: Experimental Cell Physiology</td>
</tr>
<tr>
<td>PSL1047H</td>
<td>Advanced Topics: Somatosensory and Pain Neuroscience</td>
</tr>
<tr>
<td>PSL1050H</td>
<td>Advanced Topics: The Hippocampus from Cell to Behaviour</td>
</tr>
<tr>
<td>PSL1053H</td>
<td>Advanced Topics: Critical Assessment of Ion Channel Function</td>
</tr>
<tr>
<td>PSL1068H</td>
<td>Advanced Topics: Molecular Basis of Behaviour</td>
</tr>
<tr>
<td>PSL1075H</td>
<td>Biology In Time</td>
</tr>
<tr>
<td>PSL1441H</td>
<td>Systems Level Neuroplasticity</td>
</tr>
<tr>
<td>PSL1445H</td>
<td>Mechanistic Molecular and Cellular Neuroscience</td>
</tr>
<tr>
<td>PSL1446H</td>
<td>Molecular and Cellular Aspects of Neural Disorders</td>
</tr>
<tr>
<td>PSL1452H</td>
<td>Fundamentals of Ion Channel Function</td>
</tr>
<tr>
<td>PSY1200H</td>
<td>Selected Topics in Psychology</td>
</tr>
<tr>
<td>PSY4706H</td>
<td>Human Brain Neuroanatomy</td>
</tr>
<tr>
<td>PSY5101H</td>
<td>Mechanisms of Behaviour</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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</tr>
<tr>
<td>PSY5110H</td>
<td>Advanced Topics in Behavioural Neuroscience I</td>
</tr>
<tr>
<td>PSY5111H</td>
<td>Advanced Topics in Behavioural Neuroscience II</td>
</tr>
<tr>
<td>PSY5112H</td>
<td>Advanced Topics in Behavioural Neuroscience III</td>
</tr>
<tr>
<td>PSY5121H</td>
<td>Advanced Topics in Animal Behaviour and Motivation II</td>
</tr>
<tr>
<td>PSY5130H</td>
<td>Advanced Topics in Neuropsychology I</td>
</tr>
<tr>
<td>PSY5201H</td>
<td>Audition</td>
</tr>
<tr>
<td>PSY5203H</td>
<td>Higher Cognition</td>
</tr>
<tr>
<td>PSY5204H</td>
<td>Attention</td>
</tr>
<tr>
<td>PSY5205H</td>
<td>Memory</td>
</tr>
<tr>
<td>PSY5210H</td>
<td>Advanced Topics in Perception I</td>
</tr>
<tr>
<td>PSY5211H</td>
<td>Advanced Topics in Perception II</td>
</tr>
<tr>
<td>PSY5212H</td>
<td>Advanced Topics in Perception III</td>
</tr>
<tr>
<td>PSY5220H</td>
<td>Advanced Topics in Cognition I</td>
</tr>
<tr>
<td>PSY5221H</td>
<td>Advanced Topics in Cognition II</td>
</tr>
<tr>
<td>PSY5222H</td>
<td>Advanced Topics in Cognition III</td>
</tr>
<tr>
<td>PSY5310H</td>
<td>Advanced Topics in Development I</td>
</tr>
<tr>
<td>PSY5311H</td>
<td>Advanced Topics in Development II</td>
</tr>
<tr>
<td>REH1510H</td>
<td>Disordered and Restorative Motor Control</td>
</tr>
<tr>
<td>REH5100H</td>
<td>Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications</td>
</tr>
</tbody>
</table>

* Course that may continue over a program. Credit is given when the course is completed.

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.

### Other Courses

Courses not specifically in neuroscience which do not fulfill the requirements as neuroscience courses but might be useful for neuroscience students.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBL1507H</td>
<td>Biochemistry of Inherited Disease</td>
</tr>
<tr>
<td>JDB1025H</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>PSY5102H</td>
<td>Motivational Processes</td>
</tr>
<tr>
<td>SLP1522Y</td>
<td>Speech Physiology and Acoustics</td>
</tr>
<tr>
<td>SLP1533Y</td>
<td>Aphasia</td>
</tr>
<tr>
<td>SLP3001H</td>
<td>Theoretical Foundations of Communication Sciences</td>
</tr>
</tbody>
</table>
Next-Generation Precision Medicine

Next-Generation Precision Medicine: Introduction

Lead Faculty of the Collaborative Specialization

Pharmacy

Participating Degree Programs

Chemistry — PhD
Chemical Engineering and Applied Chemistry — PhD
Molecular Genetics — PhD
Pharmaceutical Sciences — PhD

Supporting Units

Graduate Department of Pharmaceutical Sciences;
Precision Medicine Initiative at U of T (PRiME)

Overview

The graduate programs listed above participate in the doctoral Collaborative Specialization (CS) in Next-Generation Precision Medicine, which offers the opportunity for cross-disciplinary research leading to doctoral degrees.

This CS is designed to foster cross-disciplinary training and collaboration across diverse departments at the University. The academic research focus is on cutting-edge technologies and methods to develop novel therapeutic strategies, create new tools for disease diagnosis, and enable a deeper understanding of disease biology through integration of principles and methods across the physical and life sciences and engineering. Future advances in precision medicine will require a multidisciplinary perspective and creative solutions beyond conventional genomics and mutational profiling. This CS aims to equip researchers with novel approaches to address unmet human health challenges by providing an understanding of commercialization and translation activities that will help advance research discoveries into impactful outcomes.

Upon successful completion of the PhD degree requirements of the participating home graduate unit and the CS, students will receive the notation “Completed Collaborative Specialization in Next-Generation Precision Medicine” on their transcript.

Contact and Address

Web: www.education.prime.utoronto.ca
Email: prime.education@utoronto.ca
Telephone: (416) 946-7022

Christine Misquitta
Collaborative Specialization in Next-Generation Precision Medicine
144 College Street, room 905
Toronto, Ontario M5S 3M2
Canada

Next-Generation Precision Medicine: Doctoral Level

Admission Requirements

• Applicants must meet the admission requirements of both the home graduate unit and the collaborative specialization (CS).
• Applicants must apply to and be admitted to both the CS and a participating doctoral degree program.
• Applicants must be supervised by a core faculty member of the CS and are encouraged to have a co-supervisor or a member of their supervisory committee with research expertise in a different field of study.
• Applicants must have a thesis project focused on drug discovery, diagnostic development, or another topic related to next-generation precision medicine.

Specialization Requirements

• Students must meet the degree requirements of the School of Graduate Studies, the participating home graduate program, and the collaborative specialization.
• The student’s thesis in their home program must be in the area of next-generation precision medicine.
• The plan of study will include at least 1.0 full-course equivalent (FCE) (combined course modules and seminar course as described below):
  o Students must complete PHM1500H Next-Generation Precision Medicine Seminar Series (0.5 FCE), offered through the Graduate Department of Pharmaceutical Sciences.
  o Course modules (0.25 or 0.5 FCE each) will be offered through the CS and participating departments. Students must take any (one or two) of the modules recognized by the CS for a total of 0.5 FCE.
# Next-Generation Precision Medicine: Courses

## Required Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHM1500H</td>
<td>Next-Generation Precision Medicine Seminar Series</td>
</tr>
</tbody>
</table>

## Modular Courses

Each modular course is worth 0.25 full-course equivalent (FCE).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE1134H</td>
<td>Advances in Bioengineering</td>
</tr>
<tr>
<td>CHE1333H</td>
<td>Biomaterials Engineering for Nanomedicine</td>
</tr>
<tr>
<td>CHE1334H</td>
<td>Organ-on-a-chip Engineering</td>
</tr>
<tr>
<td>CHM1056H</td>
<td>Techniques for Studying the Chemical, Structural, and Dynamic Properties of Biomolecules</td>
</tr>
<tr>
<td>CHM1059H</td>
<td>Chemical Biology in Complex Systems</td>
</tr>
<tr>
<td>CHM1068H</td>
<td>Topics in Biological and Medicinal Chemistry</td>
</tr>
<tr>
<td>PHM1500H</td>
<td>Next-Generation Precision Medicine Seminar Series</td>
</tr>
<tr>
<td>PHM2101H</td>
<td>Pharmaceutical Sciences Module: Precision in vitro Diagnostics</td>
</tr>
<tr>
<td>PHM2102H</td>
<td>Pharmaceutical Sciences Module: Introduction to Fundamentals of Drug Discovery</td>
</tr>
</tbody>
</table>
Psychology and Engineering

Psychology and Engineering: Introduction

Lead Faculty of the Collaborative Specialization

Applied Science and Engineering

Participating Degree Programs

Civil Engineering — MASc, PhD
Electrical and Computer Engineering — MASc, PhD
Mechanical and Industrial Engineering — MASc, PhD
Psychology — MA, PhD

Supporting Units

Department of Mechanical and Industrial Engineering

Overview

The Collaborative Master’s Specialization in Psychology and Engineering (PsychEng) is between the Departments of Mechanical and Industrial Engineering, Civil and Mineral Engineering, Electrical and Computer Engineering in the Faculty of Applied Science and Engineering, and the Department of Psychology in the Faculty of Arts and Science.

Engineering involves the creative application of science to the design of systems, processes, structures, and technologies. Psychology is a science that focuses on the mind and behaviour of people and animals to understand individuals and groups across all levels of analyses, from the cellular to the cultural. The Psychology and Engineering collaborative specialization supports graduate students and faculty interested in contributing to the growing interdisciplinary scholarship at the nexus of psychology and engineering. Fields of study that may benefit from this collaborative specialization include, but are not limited to: human factors, design theory and methodology, artificial intelligence and information engineering, operations research, and robotics. This specialization strengthens ties between the two departments, and may propel research of interest to both beyond what is possible individually.

Upon successful completion of the master’s and/or doctoral degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Psychology and Engineering” on their transcript.

Contact and Address

Web: gradstudies.engineering.utoronto.ca/collaborative-specialization-psychology-engineering-psycheng
Email: psych_eng@mie.utoronto.ca

Psychology and Engineering: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to a doctoral-level graduate degree program in one of the collaborating graduate units.
- Applicants must provide:
  - A statement of purpose that describes the applicant’s background experience relating to psychology and engineering, and motivation for pursuing studies in PsychEng. Complete the online application form.
  - A supervisor’s letter of recommendation in support of the student’s application to PsychEng.

Specialization Requirements

- Two sessions of APS1308Y PsychEng Seminar Series — PhD Level (Credit/No Credit) worth 0.0 full-course equivalent (FCE).
- Two PsychEng elective half courses (1.0 FCE). One of the courses must be from the other discipline. Students from either discipline (psychology or engineering) should first consult with the instructor before registering for a course in the other discipline to ensure adequate fit in terms of interest and preparation.
- A thesis focused on a topic in the area of the collaborative specialization.
- Students who have completed the PsychEng collaborative specialization at the master’s level must take the core seminar course at the PhD level, which requires a higher level of participation; i.e., present more frequently and/or take a leadership role in seminar activities such as the discussion of research papers. Students take two further (different) PsychEng electives during their doctoral program, and their research will be at a level appropriate to a PhD degree.
- All students enrolled in the collaborative specialization must complete the requirements of the collaborative specialization, in addition to those requirements for the degree program in their home graduate unit. The collaborative specialization director and/or specialization committee is/are responsible for certifying the completion of the collaborative specialization requirements. The home graduate unit is solely responsible for the approval of the student’s home degree requirements.

Telephone: (416) 946-3028
Fax: (416) 978-7753

Collaborative Specialization in Psychology and Engineering
Department of Mechanical and Industrial Engineering
University of Toronto
5 King’s College Road
Toronto, Ontario M5S 3G8
Canada
Psychology and Engineering: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must provide:
  - A statement of purpose that describes background experience relating to psychology and engineering, and motivation for pursuing studies in PsychEng. Complete the online application form.
  - A supervisor's letter of recommendation in support of the student’s application to PsychEng.

Specialization Requirements

- Two sessions of APS1305H PsychEng Seminar Series — Master's Level (Credit/No Credit) worth 0.0 full-course equivalent (FCE).
- Two PsychEng elective half courses (1.0 FCE). One of the courses must be from the other discipline. Students from either discipline (psychology or engineering) should first consult with the instructor before registering for a course in the other discipline to ensure adequate fit in terms of interest and preparation.
- A thesis focused on a topic in the area of the collaborative specialization.
- All students enrolled in the collaborative specialization must complete the requirements of the collaborative specialization, in addition to those requirements for the degree program in their home graduate unit. The collaborative specialization director and/or specialization committee is/are responsible for certifying the completion of the collaborative specialization requirements. The home graduate unit is solely responsible for the approval of the student’s home degree requirements.

Psychology and Engineering: Courses

Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS1305H</td>
<td>PsychEng Seminar Series — Master's Level</td>
</tr>
<tr>
<td></td>
<td>(Credit/No Credit)</td>
</tr>
<tr>
<td>APS1308Y</td>
<td>PsychEng Seminar Series — Doctoral Level</td>
</tr>
<tr>
<td></td>
<td>(Credit/No Credit)</td>
</tr>
</tbody>
</table>

Elective Courses

Civil Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV1320H</td>
<td>Indoor Air Quality</td>
</tr>
</tbody>
</table>
Public Health Policy

Public Health Policy: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Health Administration — MHSc
Health Policy, Management and Evaluation — MSc, PhD
Kinesiology — MSc, PhD
Nutritional Sciences — MSc, PhD
Public Health Sciences — MPH, MSc, PhD
Public Policy — MPP
Social Work — MSW, PhD

Supporting Units

Dalla Lana School of Public Health

Overview

The Collaborative Specialization in Public Health Policy provides students with exemplary training in public health policy, which fosters synergies and cross-disciplinary learning. It gives students the capacity to engage in current events and contribute to the development, refinement, and evaluation of policies to address society's pressing and emerging public health priorities.

The collaborative specialization is cross-disciplinary, bringing together a broad range of disciplines, substantive foci, and theoretical and methodological underpinnings, to synergistically build an engaged community of practice of students and faculty focused on public health policy. It contributes to the creation of the next generation of public health policy research leaders and creative agents for change, able to address current health issues and challenges.

Through the direction of the stellar team of academics and policy-makers associated with the collaborative specialization, students are provided with real-world skills to address the complex and demanding task of public health policy-making (including insight into a wide array of legislative and regulatory interventions, administrative practices, financing and funding decisions, and various forms of soft law, such as guidelines and informal processes) which operate at the international, federal, provincial, and municipal levels in ways that are both cross-jurisdictional and cross-sectoral.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Public Health Policy" on their transcript.

Public Health Policy: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Complete the application form available on the website.
- Curriculum vitae (CV); maximum length: five pages.
- Two-page, free-form essay outlining:
  - interest in public health policy
  - aspirations
  - learning goals
  - career plans
  - specific research plans (if in a research program of study)
  - experience relevant to public health policy.
- Letters from two references. The letters of reference should describe the student's academic ability and career aspirations and comment on the student's potential benefit from the collaborative specialization.

Specialization Requirements

- Individual student plans of study must meet the requirements of both the home graduate unit and the collaborative specialization. To fulfil the requirements of the collaborative specialization, students must complete the following:
  - Undertake the major paper, thesis, or practicum placement with a public health policy focus under the supervision of one of the collaborative specialization's core faculty members.
  - Complete 1.0 full-course equivalent (FCE) in public health policy from the following list: CHL5300H Public Health Policy, CHL5308H Tools and Approaches for Public Health Policy Analysis and Evaluation, HAD5011H Canada's Health Care System, or PPG1001H The Policy Process.
  - Complete the Master's Seminar Series course, SRM3333H.
- All students enrolled in the collaborative specialization must complete the requirements of the collaborative specialization, in addition to those requirements for the degree program in their home graduate unit.
Public Health Policy: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Complete the application form available on the website.
- Curriculum vitae (CV); maximum length: five pages.
- Two-page, free-form essay outlining:
  - interest in public health policy
  - aspirations
  - learning goals
  - career plans
  - specific research plans
  - experience relevant to public health policy.
- Letters from two references. One letter should come from the prospective supervisor and should describe availability of resources necessary to carry out research, including the type of mentoring the supervisor will be able to provide, comments on academic progress, and the student's potential benefit from the collaborative specialization.

Specialization Requirements

- Individual student plans of study must meet the requirements of both the home graduate unit and the collaborative specialization.
- To fulfill the requirements of the collaborative specialization, students must complete the following:
  - Undertake thesis research with a public health policy focus under the supervision of one of the collaborative specialization's core faculty members.
  - Complete 1.0 full-course equivalent (FCE) in public health policy from the following list: CHL5300H Public Health Policy, CHL5308H Tools and Approaches for Public Health Policy Analysis and Evaluation, HAD5011H Canada's Health Care System, or PPG1001H The Policy Process. Students who have completed two of the four courses listed above may be considered for a course reduction of up to 1.0 FCE in the PhD program.
  - Completion of the graduate seminar series course CHL5309H.
- All students enrolled in the collaborative specialization must complete the requirements of the collaborative specialization, in addition to those requirements for the degree program in their home graduate unit.

Public Health Policy: Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHL5300H</td>
<td>Public Health Policy</td>
</tr>
<tr>
<td>CHL5308H</td>
<td>Tools and Approaches for Public Health Policy Analysis and Evaluation</td>
</tr>
<tr>
<td>CHL5309H</td>
<td>Advanced Analysis of Topical Issues in Public Health Policy</td>
</tr>
</tbody>
</table>
Resuscitation Sciences

Resuscitation Sciences: Introduction

Admissions to the collaborative specialization in Resuscitation Sciences have been administratively suspended.

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Biomedical Engineering — PhD
Clinical Engineering — MHSch
Community Health — MScCH
Health Policy, Management and Evaluation — MSc, PhD
Immunology — MSc, PhD
Laboratory Medicine and Pathobiology — MSc, PhD
Mechanical and Industrial Engineering — MASc, MEng, PhD
Medical Science — MSc, PhD
Nursing Science — MN, PhD
Pharmacology — MSc, PhD
Physiology — MSc, PhD
Public Health Sciences — MPH, MSc, PhD
Rehabilitation Science — MSc, PhD

Overview

The goal of the Collaborative Specialization in Resuscitation Sciences is to train scientists pursuing research in the optimal care of the acutely ill and injured patient and, ultimately, to create leaders in the discipline who will supervise others providing this level of scientific inquiry. The collaborative specialization appeals to students from a wide variety of backgrounds with an interest in any aspect of resuscitation science.

Resuscitation Sciences includes a number of medical areas such as trauma, critical care, emergency medicine, neurotrauma, anaesthesia, shock, sepsis, acute coronary syndrome, paediatric care, cardiovascular, peripheral vascular, and rehabilitation medicine. Many non-medicine disciplines such as engineering, basic science, and public health, as well as allied health professions such as nursing, pharmacy, and paramedicine, will find synergies in the Resuscitation Sciences specialization. Research programs can use methodologies ranging from molecular medicine and genomics through clinical trials and outcomes to engineering, health administration, and health prevention strategies. Resultant advances in knowledge will ultimately be applied to the clinical setting.

Interested students must first apply to and be accepted in one of the participating degree programs listed above, and then apply to the collaborative specialization. Students must follow a course of study acceptable to both the home unit and the collaborative specialization. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Resuscitation Sciences" on their transcript.

Contact and Address

Web: www.resuscitationscience.ca
Email: csrsinfo@smh.ca
Telephone: (416) 864-6060 ext. 7843
Fax: (416) 864-5934

Collaborative Specialization in Resuscitation Sciences
c/o Rescu, St. Michael's Hospital
30 Bond Street
Toronto, Ontario M5B 1W8
Canada

Resuscitation Sciences: Master's Level

Admission Requirements

- Collaborative specializations are administered under the auspices of the School of Graduate Studies.
- Applicants must be accepted for admission to a participating graduate unit and comply with the admission procedures of that unit before applying to the Collaborative Specialization in Resuscitation Sciences.
- Applicants must submit the following to the collaborative specialization committee:
  - a resumé or curriculum vitae (CV)
  - a personal statement explaining how their course of study and specific research interests relate to resuscitation science
  - a letter of recommendation from a faculty member, usually the thesis supervisor in a thesis-based graduate program, commenting on the student's academic abilities and likelihood for research success in the field of resuscitation sciences.

Specialization Requirements

- Students must register in the master's degree program through one of the participating home graduate units. They must meet all respective degree requirements of the School of Graduate Studies and their participating home graduate unit.
- In addition to meeting the home graduate unit program requirements, students will be required to:
  - take the core course MSC4001H Foundations in Resuscitation Science Research
  - attend at least 75% of the SRM3333H Resuscitation Sciences Graduate Seminar Series over two consecutive sessions
  - complete a thesis, comprehensive paper, or practicum (whichever is included in their course of study) in the area of resuscitation sciences under the supervision of a faculty member affiliated with the collaborative specialization
Resuscitation Sciences: Doctoral Level

Admission Requirements

- Collaborative specializations are administered under the auspices of the School of Graduate Studies.
- Applicants must be accepted for admission to a participating graduate unit and comply with the admission procedures of that unit before applying to the Collaborative Specialization in Resuscitation Sciences.
- Applicants must submit the following to the collaborative specialization committee:
  - a resumé or curriculum vitae (CV)
  - a personal statement explaining how their course of study and specific research interests relate to resuscitation science
  - a letter of recommendation from a faculty member, usually the thesis supervisor in a thesis-based graduate program, commenting on the student's academic abilities, and likelihood for research success in the field of resuscitation sciences.

Specialization Requirements

- Students must register in the degree program through one of the participating home graduate units. They must meet all respective degree requirements of the School of Graduate Studies and their participating home graduate unit.
- In addition to meeting the home graduate unit program requirements, students will be required to:
  - take the core course MSC4001H Foundations in Resuscitation Science Research (doctoral students who have already taken this course as part of their master's program will be exempted)
  - take MSC4002H Advanced Topics in Resuscitation Science Research, a type 2 graduate seminar series
  - complete a thesis in the area of resuscitation sciences
  - attend at least 75% of the SRD4444H Resuscitation Sciences Graduate Seminar Series over two consecutive years
  - present their research at least twice at either the Resuscitation in Motion scientific meeting or in the Foundations MSC4001H core course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRM3333H</td>
<td>Resuscitation Sciences Graduate Seminar Series (master's level)</td>
</tr>
<tr>
<td>SRD4444H</td>
<td>Resuscitation Sciences Graduate Seminar Series (doctoral level)</td>
</tr>
</tbody>
</table>

Resuscitation Sciences: Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC4001H</td>
<td>Foundations in Resuscitation Science Research</td>
</tr>
<tr>
<td>MSC4002H</td>
<td>Advanced Topics in Resuscitation Science Research (PhD students only)</td>
</tr>
</tbody>
</table>
Sexual Diversity Studies

Sexual Diversity Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Anthropology — MA, MSc, PhD
Art History — MA, PhD
Cinema Studies — MA
Classics — MA, PhD
Comparative Literature — MA, PhD
Counselling and Clinical Psychology — MA, PhD
Counselling Psychology — MEd, EdD
Criminology and Sociolegal Studies — MA, PhD
Curriculum and Pedagogy — MA, MEd, PhD
Drama, Theatre and Performance Studies — MA, PhD
East Asian Studies — MA, PhD
Educational Leadership and Policy — MA, MEd, EdD, PhD
English — MA, PhD
French Language and Literature — MA, PhD
Geography — MA, PhD
Higher Education — MA, MEd, EdD, PhD
History — MA, PhD
History and Philosophy of Science and Technology — MA, PhD
Immunology — PhD
Information — MI, PhD
Italian Studies — MA, PhD
Kinesiology — MSc, PhD
Law — LLM, MSL, SJD
Linguistics — MA, PhD
Medieval Studies — MA, PhD
Museum Studies — MMSt
Music — MA, PhD
Near and Middle Eastern Civilizations — MA, PhD
Philosophy — MA, PhD
Political Science — MA, PhD
Psychology — MA, PhD
Public Health Sciences — MPH, MSc, PhD
Public Policy — MPP
Religion — MA, PhD
Slavic Languages and Literatures — MA, PhD
Social Justice Education — MA, MEd, EdD, PhD
Social Work — MSW, PhD
Sociology — MA, PhD
Sustainability Management — MScSM
Visual Studies — MVS
Women and Gender Studies — MA, PhD

Supporting Unit

Mark S. Bonham Centre for Sexual Diversity Studies

Overview

The Collaborative Specialization in Sexual Diversity Studies, offered by the Mark S. Bonham Centre for Sexual Diversity Studies, is rigorously interdisciplinary and recognizes sexual diversity studies as an interdisciplinary field of inquiry. While it has emerged as an autonomous scholarly area, many of those who work within it engage questions of gender, ethnicity, race, Aboriginal status, (dis)ability, and class, to highlight the importance of exploring their interaction with sexual differences.

The graduate degree programs listed above participate in the collaborative specialization. From their home graduate units, students may take up questions from their own disciplinary or programmatic perspective, but explore it through the theoretical and methodological lens of sexuality studies. Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Sexual Diversity Studies” on their transcript.

Contact and Address

Web: sds.utoronto.ca
Email: sexual.diversity@utoronto.ca
Telephone: (416) 978-6276 for general inquiries
Fax: (416) 971-2027

Director, Sexual Diversity Studies Collaborative Specialization
Mark S. Bonham Centre for Sexual Diversity Studies
University of Toronto
Room 251, University College
15 King's College Circle
Toronto, Ontario M5S 3H7
Canada

Sexual Diversity Studies: Master’s Level

Admission Requirements

- Each graduate student in the collaborative specialization shall be enrolled in a participating degree program in the graduate unit where the research is conducted, which is known as the home graduate unit. The student shall meet the admission requirements of both the home graduate unit and the collaborative specialization.

Specialization Requirements

- Students must meet all respective degree requirements of the School of Graduate Studies and the participating graduate unit, and meet the requirements of the collaborative specialization as follows:
  - 0.5 full-course equivalent (FCE) core course in Sexual Diversity Studies (SDS1000H)
  - 0.5 FCE in other courses with substantial treatment of sexual diversity
  - thesis or major research paper (if applicable) must be on a sexual diversity studies topic.
• Courses may be counted towards the 0.5 FCE beyond the core course if a significant portion of the course addresses questions related to sexuality, or if most of the session work completed in association with it explores such questions.
• All course selection for the additional 0.5 FCE must be approved by the collaborative specialization director.

Sexual Diversity Studies: Doctoral Level

Admission Requirements

• Each graduate student in the collaborative specialization shall be enrolled in a participating degree program in the graduate unit where the research is conducted, which is known as the home graduate unit. The student shall meet the admission requirements of both the home graduate unit and the collaborative specialization.

Specialization Requirements

• Students must meet all respective degree requirements of the School of Graduate Studies and the participating graduate unit; and meet the requirements of the collaborative specialization as follows:
  o 0.5 FCE core course in Sexual Diversity Studies (SDS1000H)
  o 0.5 FCE in other courses with substantial treatment of sexual diversity
  o thesis or major research paper (if applicable) must be on a sexual diversity studies topic.
• Doctoral students in the program who have completed the collaborative specialization at the master's level will not be required to repeat SDS1000H. All course selection for the additional 0.5 FCE must be approved by the collaborative specialization director.
• The doctoral thesis committee should include at least one faculty member associated with Sexual Diversity Studies. In most cases, the supervisor would be associated with Sexual Diversity Studies, though in some cases, the student's particular analytical perspective will suggest another faculty member in her or his discipline.
• The student's course of study and overall progress will be reviewed annually by the collaborative specialization director, though ultimate responsibility for the student's progress will remain with the graduate chair of the home program.

Sexual Diversity Studies: Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS1000H</td>
<td>Theoretical and Methodological Issues in Sexual Diversity Studies</td>
</tr>
<tr>
<td>SDS1002H</td>
<td>Comparative Disciplinary Approaches: A Research Seminar (prerequisite: SDS1000H or permission of the instructor)</td>
</tr>
</tbody>
</table>
South Asian Studies

South Asian Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Anthropology — MA, MSc, PhD
Comparative Literature — MA, PhD
Drama, Theatre and Performance Studies — MA, PhD
East Asian Studies — MA, PhD
English — MA, PhD
Geography — MA, PhD
History — MA, PhD
Music — MA, PhD
Political Science — PhD
Religion — MA, PhD
Social Justice Education — MA, MEd, EdD, PhD
Women and Gender Studies — MA, PhD

Overview

The interdisciplinary Collaborative Master's and Doctoral Specialization in South Asian Studies is designed for students who wish to acquire a nuanced understanding of South Asia as a secondary area of specialization while pursuing graduate studies in another discipline. The focus of South Asian Studies is necessarily broad in that it provides students with an understanding of ancient and modern history, social change, economic development, contemporary politics, religious traditions, literary culture, and a spectrum of related topics.

The Centre for South Asian Studies, which administers the collaborative specialization, provides a nucleus for the participation of South Asian Studies scholars from across the University. Students will benefit from the physical presence of the centre and its regular activities of research fora, conferences, and visiting lecturer and scholar programs. In addition, the University's library collection in South Asian studies is the largest in Canada.

Master's and doctoral students wishing to be admitted to the collaborative specialization must apply to one of the participating graduate programs.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in South Asian Studies" on their transcript.

Contact and Address

Web: munkschool.utoronto.ca/csas/graduate-study
Email: southasian.grad@utoronto.ca
Telephone: (416) 946-8832
Fax: (416) 946-8838

Collaborative Specialization in South Asian Studies
Centre for South Asian Studies
Munk School of Global Affairs and Public Policy
University of Toronto
Room 228N, 1 Devonshire Place
Toronto, Ontario M5S 3K7
Canada

South Asian Studies: Master's Level

Admission Requirements

• Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants must meet the admission requirements of the graduate unit in which they intend to enrol. Admission will be subject to the approval of the graduate unit concerned and the collaborative specialization committee.

Specialization Requirements

• A mandatory half-year core course entitled Issues in South Asian Studies taught by the core faculty. The core course will be the same for both master's and doctoral students. Master's students who proceed to the doctoral program will not be required to take the core course again. With the permission of the home graduate unit, the core course can be taken in lieu of one of the courses required by the home unit.
• Attendance at a minimum of two lectures per session from the lecture series organized by the Centre for South Asian Studies during the academic year in which the student takes the core course (September to May).
• If writing a thesis, it is expected to include a significant South Asian component.
• For master's students writing a research paper, the home unit will determine whether a South Asian component is required in the research paper.
• For master's students writing a thesis and master's students writing a research paper, language requirements will be assessed on a case-by-case basis.
South Asian Studies: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants must meet the admission requirements of the graduate unit in which they intend to enrol. Admission will be subject to the approval of the graduate unit concerned and the collaborative specialization committee.

Specialization Requirements

- A mandatory half-year core course entitled *Issues in South Asian Studies* taught by the core faculty (unless already taken in the master's program). With the permission of the home graduate unit, the core course can be taken in lieu of one of the courses required by the home unit.
- Attendance at a minimum of two lectures per session from the lecture series organized by the Centre for South Asian Studies (CSAS) for a total of two years, including the academic year in which the student takes the core course (September to May).
- Submission of two short articles responding to CSAS events (one per year during the two years of attendance at the CSAS lecture series), to be submitted to the collaborative specialization administrator for review by the collaborative specialization director and potentially shared online.
- The dissertation to include a significant South Asian component.
- A research presentation to the collaborative specialization committee on a South Asian topic in Year 3 or Year 4.
- Language requirement, depending on the student's area of specialization.

South Asian Studies: Courses

Core Course

SAS2004H Issues in South Asian Studies
Toxicology

Toxicology: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Laboratory Medicine and Pathobiology — MSc, PhD
Medical Science — MSc, PhD
Nutritional Sciences — MSc, PhD
Pharmaceutical Sciences — MSc, PhD
Pharmacology — MSc, PhD

Overview

The Collaborative Specialization in Toxicology provides graduate students with a unique opportunity to gain breadth and depth of knowledge in toxicology beyond their thesis research area. This collaborative specialization aims to prepare participants for careers related to toxicology. It emphasizes the development of critical thinking and effective communication skills in addition to acquiring greater knowledge of basic principles and specific aspects of toxicology.

The graduate programs listed above participate in this collaborative specialization. Students may pursue an MSc or PhD degree. Graduate units participating in the program contribute graduate courses, provide facilities, and provide supervision for graduate research.

Graduate students from units other than the participating units listed who are interested in pursuing a program in toxicology should speak to the Director of the Collaborative Specialization in Toxicology and the graduate advisor(s) in their home graduate unit to discuss the possibility. Detailed information is available on the Toxicology website and from the Department of Pharmacology and Toxicology.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Toxicology” on their transcript.

Contact and Address

Web: pharptox.utoronto.ca/cst
Email: pharptox.dept@utoronto.ca
Telephone: (416) 978-3851

Collaborative Specialization in Toxicology
Department of Pharmacology and Toxicology
University of Toronto, Medical Sciences Building
Room 4207, 1 King’s College Circle
Toronto, Ontario M5S 1A8 Canada

Toxicology: Master's Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must first apply to and be admitted by one of the participating home graduate units under its regulations. Once students have been admitted to their home graduate unit, they should register in the Collaborative Specialization in Toxicology by contacting the collaborative specialization director.

Specialization Requirements

- Students must complete JNP1016H Graduate Seminar in Toxicology.
- Students may be required to take JNP1014Y Interdisciplinary Toxicology if they have not previously completed coursework in advanced toxicology.
- Students must attend a minimum of six academic seminars related to toxicology during the master’s program.
- Students must complete a research thesis or project as required by the home graduate unit. It is understood that the research topic will be in the area of toxicology.

Toxicology: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must first apply to and be accepted by one of the participating home graduate units under its regulations. Once students have been admitted to their home graduate unit, they should register in the Collaborative Specialization in Toxicology by contacting the collaborative specialization director.

Specialization Requirements

- Students must complete JNP1016H Graduate Seminar in Toxicology, plus a 0.5 full-course equivalent (FCE) in the area of toxicology (approved by the collaborative specialization director). The home unit and the collaborative specialization director will decide whether these courses are in addition to, or substitutions for, requirements of the home graduate unit.
- Students may be required to take JNP1014Y Interdisciplinary Toxicology if they have not previously completed coursework in advanced toxicology.
- Students must attend a minimum of 12 academic seminars related to toxicology during the doctoral specialization.
- Students must complete a research thesis or project as required by the home graduate unit. It is understood that the research topic will be in the area of toxicology.
## Toxicology: Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNP1014Y</td>
<td>Interdisciplinary Toxicology</td>
</tr>
<tr>
<td>JNP1016H</td>
<td>Graduate Seminar in Toxicology (prerequisite or co-requisite: JNP1014Y)</td>
</tr>
</tbody>
</table>
Women and Gender Studies (Collaborative Specialization)

Women and Gender Studies: Introduction

Lead Faculty of the Collaborative Specialization

Arts and Science

Participating Degree Programs

Adult Education and Community Development — MA, MEd, PhD
Anthropology — MA, MSc, PhD
Cinema Studies — MA
Classics — MA, PhD
Comparative Literature — MA, PhD
Counselling and Clinical Psychology — MA, PhD
Counselling Psychology — MEd, EdD
Criminology and Sociolegal Studies — MA, PhD
Curriculum and Pedagogy — MA, MEd, PhD
Drama, Theatre and Performance Studies — MA, PhD
East Asian Studies — MA, PhD
Educational Leadership and Policy — MA, MEd, EdD, PhD
English — MA, PhD
French Language and Literature — MA, PhD
Geography — MA, MSc, PhD
Germanic Languages and Literatures — MA
Germanic Literature, Culture and Theory — PhD
Health Administration — MHSc
Health Policy, Management and Evaluation — MSc, PhD
Higher Education — MA, MEd, EdD, PhD
History — MA, PhD
Information — MI, PhD
Kinesiology — MSc, PhD
Language and Literacies Education — MA, MEd, PhD
Law — LLM, SJD
Medieval Studies — MA, PhD
Near and Middle Eastern Civilizations — MA, PhD
Philosophy — MA, PhD
Planning — MScPI, PhD
Political Science — MA, PhD
Public Health Sciences — MPH, PhD
Religion — MA, PhD
Social Justice Education — MA, MEd, EdD, PhD
Social Work — MSW, PhD
Sociology — MA, PhD
Spanish — MA, PhD

capitalism, violence, political economy, cultural formations, aesthetics, and other pressing concerns.

The graduate programs listed above participate in the Collaborative Specialization in Women and Gender Studies at the University of Toronto. The collaborating units contribute courses and provide facilities and supervision for graduate research. The collaborative specialization is administered by the Women and Gender Studies Institute (WGSi), bringing together 34 graduate programs, more than 100 courses, and more than 100 graduate faculty members. Core faculty members bring transnational feminist commitments to the study of diverse sites and their interconnection with particular focus on Canada, the Caribbean, Africa, the Middle East, South Asia, East Asia, and the United States.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation "Completed Collaborative Specialization in Women and Gender Studies" on their transcript.

Contact and Address

Web: www.wgsi.utoronto.ca/graduate/collaborative-program
Email: wgsi.programs@utoronto.ca
Telephone: (416) 978-3668
Fax: (416) 946-5561

Graduate Collaborative Specialization in Women and Gender Studies
Women and Gender Studies Institute
University of Toronto
Room 2036, Wilson Hall, New College
Toronto, Ontario M5S 1C6
Canada

Women and Gender Studies: Master's Level

Admission Requirements

• Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Applicants must fulfill all the degree requirements in the home graduate unit.

• Applicants to the collaborative specialization should have a substantial undergraduate background in gender and feminist studies or an equivalent focus within a discipline. In exceptional cases, extensive work or activist experience which also requires academic knowledge of research on women and/or gender will also be considered.

• Two-page statement of research intent explaining how the applicant's course of study and specific research interests relate to women and gender studies at the master's level.

• Two letters of reference outlining the applicant’s background in women and gender studies.
Specialization Requirements

- The course of study should be planned in consultation with the CWGS graduate coordinator as well as the coordinator of graduate studies in the student's home graduate unit.
- Courses should be selected from the established cross-listed courses or approved by the graduate coordinator of the collaborative specialization.

Non-thesis Master's

- A required 0.5 full-course equivalent (FCE) (WGS5000H).
- 0.5 FCE of cross-listed or approved courses with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regular attendance at the WGS Research Seminar.

Thesis Master's

- A required 0.5 FCE (WGS5000H).
- 0.5 FCE of cross-listed or approved courses with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regular attendance at the WGS Research Seminar
- The thesis, or major paper, dealing with a subject in the area of women and gender studies.
- Theses will be supervised and evaluated in the same manner as those in the home graduate unit. Normally, at least one cross-listed or core graduate faculty member of WGSI will be a member of the thesis or supervisory committee of collaborative specialization students.

Women and Gender Studies: Doctoral Level

Admission Requirements

- Applicants who wish to enrol in the collaborative specialization must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units. Students must fulfil all the degree requirements in the home graduate unit.
- Applicants to the collaborative specialization should have a substantial undergraduate or graduate background in gender and feminist studies or an equivalent focus within a discipline. In exceptional cases, extensive work or activist experience which also requires academic knowledge of research on women and/or gender will also be considered.
- Two-page statement of research intent explaining how the applicant's course of study and specific research interests relate to women and gender studies at the doctoral level.
- Two letters of reference outlining the applicant's background in women and gender studies.

Specialization Requirements

- The course of study should be planned in consultation with the CWGS graduate coordinator as well as the coordinator of graduate studies in the student's home graduate unit.

Courses should be selected from the established cross-listed courses approved by the graduate coordinator of the collaborative specialization.

- A required 0.5 FCE selected from WGS5000H or WGS5001H.
- Any other 0.5 FCE course in women and gender studies.
- 1.0 FCE of cross-listed or approved courses with a focus on women/gender/feminist/sexuality/critical race/postcolonial studies.
- Regularly participate in the WGS Research Seminar.
- Doctoral thesis dealing with a subject in the area of women and gender studies. Theses will be supervised and evaluated in the same manner as those in the home graduate unit. Normally, at least one cross-listed or core graduate faculty member with WGSI will be a member of the thesis or supervisory committee of collaborative specialization students.

Women and Gender Studies: Courses

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>WGS5000H</td>
<td>Feminist Theories, Histories, Movements I</td>
</tr>
<tr>
<td>WGS5001H</td>
<td>Feminist Theories, Histories, Movements II</td>
</tr>
</tbody>
</table>

Elective Courses

For courses offered by WGSI and cross-listed by the participating units offered in a particular year, check the collaborative specialization website.
Women's Health

Women's Health: Introduction

Lead Faculty of the Collaborative Specialization

Public Health

Participating Degree Programs

Anthropology — MA, MSc, PhD
Dentistry — MSc, PhD
English — MA, PhD
Health Policy, Management and Evaluation — MSc, PhD
Immunology — MSc, PhD
Kinesiology — MSc, PhD
Medical Science — MSc, PhD
Nursing Science — MN, PhD
Nutritional Sciences — MSc, PhD
Occupational Therapy — MScOT
Pharmacology — MSc, PhD
Psychology — MA, PhD
Public Health Sciences — MPH, PhD
Rehabilitation Science — MSc, PhD
Religion — MA, PhD
Social Work — MSW, PhD
Women and Gender Studies — MA, PhD

Overview

The Collaborative Graduate Specialization in Women's Health provides interdisciplinary training in women's health research and practice for graduate students at the University of Toronto with the goal of:

- helping students develop shared understandings of the complex interactions of biology and environment, sex and gender;
- providing students with the necessary skill set to undertake and lead interdisciplinary, collaborative health-care research projects; and
- enhancing mutually beneficial relationships among researchers and practitioners of women's health across the University and its affiliated teaching hospitals.

Students must be registered in the School of Graduate Studies through one of the participating graduate units in order to apply to the Collaborative Specialization in Women's Health. Applicants must comply with the admission procedures of that unit. There is no deadline to apply to this collaborative specialization; applications will be reviewed as they are received.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Women's Health” on their transcript.

Women's Health: Master's Level

Admission Requirements

- Applicants must be registered with the School of Graduate Studies through an affiliated home graduate unit. Before applying to the Women's Health collaborative specialization, applicants must comply with the admission procedures of their home graduate unit.
- Applicants must submit the following for review by the Executive Committee:
  - a curriculum vitae (CV)
  - a personal statement (via a concise letter no longer than two pages) describing relevant personal and/or professional experiences, a career plan, and motivation in seeking advanced training in women's health.

Specialization Requirements

- To successfully complete the collaborative specialization, students must also successfully complete the requirements of their home graduate unit.
- Complete the core course (CHL5109H Gender and Health).
- Participate in at least six monthly sessions in the Student Research Seminar Series. Students will be encouraged to build relationships with peers and faculty that cross disciplinary boundaries.
- In instances where home graduate units require a thesis, it is desirable, but not required, that this work be relevant to women's health.

Women's Health: Doctoral Level

Admission Requirements

- Applicants must be registered with the School of Graduate Studies through an affiliated home graduate unit. Before
applying to the Women's Health collaborative specialization, applicants must comply with the admission procedures of their home graduate unit.

- Applicants must submit the following for review by the Executive Committee:
  - a curriculum vitae (CV)
  - a personal statement (via a concise letter no longer than two pages) describing relevant personal and/or professional experiences, a career plan, and motivation in seeking advanced training in women's health.

Specialization Requirements

- To successfully complete the collaborative specialization, students must also successfully complete the requirements of their home graduate unit.
- Complete the core course (CHL5109H Gender and Health). Doctoral students who have satisfactorily completed the core course during their master's program are not required to repeat the course during their doctoral program.
- Students must participate in at least six monthly sessions in the Student Research Seminar Series and present their completed or in-progress research at a seventh student research seminar. Students will be encouraged to build relationships with peers and faculty that cross disciplinary boundaries.
- In addition to their home graduate unit supervisor, students must also identify a mentor — a faculty member of the collaborative specialization whose own methodologies represent a different approach than that used by the student's primary mentor.
- Devise a research plan that builds interdisciplinary research skills in women's health. The plan is developed with guidance from the graduate supervisor from their home unit and the mentor, who both sign the study/research plan.
- Complete a dissertation on a topic relevant to women's health.

Women's Health: Courses

Core Course

CHL5109H Gender and Health
Workplace Learning and Social Change

Workplace Learning and Social Change: Introduction

Lead Faculty of the Collaborative Specialization

Ontario Institute for Studies in Education (OISE)

Participating Degree Programs

- Adult Education and Community Development — MA, MEd, PhD
- Industrial Relations and Human Resources — MIRHR, PhD
- Rehabilitation Science — MSc, PhD
- Social Justice Education — MA, MEd, PhD, EdD
- Women and Gender Studies — MA

Overview

The Collaborative Specialization in Workplace Learning and Social Change is particularly suited to students interested in developing their understanding of work and learning trends in Canada and internationally, with a focus on the relationships between workplace learning and social change. The collaborative specialization has three intellectual objectives:

- to situate workplace learning within broader social trends such as globalization, neoliberalism, and organizational restructuring;
- to allow exploration of the connections between learning as an individual phenomenon and learning as a social/organizational and public policy phenomenon; and
- to highlight the learning strategies that seek to foster social change through greater equality of power, inclusivity, participatory decision-making, and economic democracy.

Applicants to participating programs who are interested in participating in the collaborative specialization must apply to and be accepted by both the graduate unit and the collaborative specialization. For admission, applicants should submit a statement of interest to the collaborative specialization director.

Upon successful completion of the degree requirements of the participating home graduate unit and the collaborative specialization, students will receive the notation “Completed Collaborative Specialization in Workplace Learning and Social Change” on their transcript.

Contact and Address

Web:
www.oise.utoronto.ca/lhae/Collaborative_Specializations/Workplace_Learning_and_Social_Change

Collaborative Specialization in Workplace Learning and Social Change
The Ontario Institute for Studies in Education
University of Toronto
252 Bloor Street West
Toronto, Ontario M5S 1V6
Canada

Workplace Learning and Social Change: Master’s Level

Admission Requirements

- Applicants must apply to and be admitted to both the collaborative specialization and a graduate degree program in one of the collaborating graduate units.
- Applicants must submit a statement of interest which includes:
  - relevant personal and/or professional experiences and motivation in seeking training in workplace learning and social change (all applicants)
  - a brief outline of their proposed research project (thesis students)
  - indication of their preference of supervisor, if any (thesis students).

Specialization Requirements

- Individual student programs of study must meet the requirements of both the home graduate unit and the collaborative specialization. Normally, the selection of courses to satisfy the collaborative specialization requirements will not extend the program length.
- Course requirements are as follows:
  - 0.5 core full-course equivalent (FCE) — WPL1131H Introduction to Workplace Learning and Social Change
  - 0.5 elective FCE in the area of workplace learning and social change.
- In addition, students in a thesis-based MA program will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative specialization core faculty will serve as supervisor or committee member.
- Course-only MEd students will be required to complete an additional 0.5 elective FCE in the area of workplace learning and social change.

Workplace Learning and Social Change: Doctoral Level

Admission Requirements

- Applicants should apply to the collaborating degree program that corresponds most closely to their general background and interests.
Applicants must submit a statement of interest which includes:
- relevant personal and/or professional experiences and motivation in seeking training in workplace learning and social change (all applicants)
- a brief outline of their proposed research project
- indication of their preference of supervisor, if any.

Specialization Requirements

Doctor of Education

Offered to students in the Social Justice Education program only.

- Individual student programs of study must meet the requirements of both the home graduate unit and the collaborative specialization. Normally, the selection of courses to satisfy the collaborative specialization requirements will not extend the program length.
- Course requirements are as follows:
  - 0.5 core full-course equivalent (FCE) — WPL3931H Advanced Studies in Workplace Learning and Social Change
  - 0.5 elective FCE in the area of workplace learning and social change.
- In addition, students will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative specialization core faculty will serve as supervisor or committee member.

Doctor of Philosophy

- Individual student programs of study must meet the requirements of both the home graduate unit and the collaborative specialization. Normally, the selection of courses to satisfy the collaborative specialization requirements will not extend the program length.
- Course requirements are as follows:
  - 0.5 core full-course equivalent (FCE) — WPL3931H Advanced Studies in Workplace Learning and Social Change
  - 0.5 elective FCE in the area of workplace learning and social change.
- In addition, students will be required to complete a thesis which incorporates issues of workplace learning and social change. A member of the collaborative specialization core faculty will serve as supervisor or committee member.

Workplace Learning and Social Change: Courses

Not all elective courses are offered each year. Visit the Workplace Learning and Social Change (WLSC) website for current course offerings.

Master’s-Level Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPL1131H</td>
<td>Introduction to Workplace Learning and Social Change</td>
</tr>
</tbody>
</table>

Master’s-Level Electives

The list of electives is subject to change.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRE1362H</td>
<td>Organizational Behaviour</td>
</tr>
<tr>
<td>IRE1611H</td>
<td>Sociology of Work and Organizations</td>
</tr>
<tr>
<td>IRE1615H</td>
<td>Labour and Globalization</td>
</tr>
<tr>
<td>IRE1620H</td>
<td>Labour Relations Problems in Historical Perspective</td>
</tr>
<tr>
<td>LHA1113H</td>
<td>Gender and Race at Work</td>
</tr>
<tr>
<td>LHA1115H</td>
<td>Learning for the Global Economy</td>
</tr>
<tr>
<td>LHA1119H</td>
<td>Creating a Learning Organization</td>
</tr>
<tr>
<td>LHA1145H</td>
<td>Participatory Research in the Community and the Workplace</td>
</tr>
<tr>
<td>LHA1146H</td>
<td>Women, War, and Learning</td>
</tr>
<tr>
<td>LHA1147H</td>
<td>Women, Migration, and Work</td>
</tr>
<tr>
<td>LHA1148H</td>
<td>Introduction to Workplace, Organizational, and Economic Democracy</td>
</tr>
<tr>
<td>LHA1150H</td>
<td>Critical Perspectives on Organizational Change</td>
</tr>
<tr>
<td>LHA1182H</td>
<td>Nonprofits, Co-operatives, and the Social Economy: An Overview</td>
</tr>
<tr>
<td>LHA1185H</td>
<td>Leadership in Organizations: Changing Perspectives</td>
</tr>
<tr>
<td>LHA1186H</td>
<td>Organizational Change in the Nonprofit and Public Sectors</td>
</tr>
<tr>
<td>LHA1195H</td>
<td>Technology @ Work: The Internet in Workplace Learning and Change</td>
</tr>
<tr>
<td>LHA5100H</td>
<td>Special Topics in Adult Education and Community Development (Master’s Level)*</td>
</tr>
<tr>
<td>LHA5800H</td>
<td>Special Topics in Higher Education: Master’s Level*</td>
</tr>
<tr>
<td>SJE3916H</td>
<td>Women in Leadership Positions: Intersectionalities and Leadership Practices: Sociological Implications in Education</td>
</tr>
<tr>
<td>SJE5000H</td>
<td>Special Topics in Social Justice Research in Education: Master’s Level*</td>
</tr>
<tr>
<td>WGS 486 / WGS1020H</td>
<td>Gender and Globalization: Transnational Perspectives</td>
</tr>
<tr>
<td>WPL2944H</td>
<td>Sociology of Learning and Social Movements</td>
</tr>
</tbody>
</table>

*Special topics courses: Only the special topics course titles listed can be counted toward the WLSC specialization requirements in the current year. Please confirm current year courses with the WLSC administrator.
**Doctoral-Level Core Course**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPL3931H</td>
<td>Advanced Studies in Workplace Learning and Social Change</td>
</tr>
</tbody>
</table>

**Doctoral-Level Electives**

The list of electives is subject to change. Doctoral students can select an elective course from the list above or take one of the following to meet their elective requirement:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHA1108H</td>
<td>Adult Learning</td>
</tr>
<tr>
<td>LHA3183H</td>
<td>Introduction to Institutional Ethnography (RM)</td>
</tr>
<tr>
<td>LHA5105H</td>
<td>Special Topics in Adult Education and Community Development: Master's Level</td>
</tr>
<tr>
<td>LHA6100H*</td>
<td>Special Topics in Adult Education and Community Development: Doctoral Level*</td>
</tr>
<tr>
<td>WPL2944H</td>
<td>Sociology of Learning and Social Movements</td>
</tr>
</tbody>
</table>

*Special topics courses: Only the special topics course titles listed can be counted toward the WLSC specialization requirements in the current year. Please confirm current year courses with the WLSC administrator.*
Combined Degree Programs

The University of Toronto offers approximately 140 combined degree programs (CDPs). This program category allows a student to study in two approved degree programs at the same time and to complete the requirements of both, providing a distinctive academic benefit to the student either through academic enrichment or academic acceleration. CDPs build on a strong academic rationale or synergy between the programs in the combination.

CDPs may embody the following combinations:

- undergraduate / master’s degree programs
- second-entry undergraduate / master’s degree programs
- second-entry undergraduate / doctoral degree programs
- master’s / master’s degree programs

A CDP is an entity; the student is registered in a CDP as well as in the two participating degree programs. On successful completion of the CDP, the student receives two degrees.
UTM, Astronomical Sciences (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Ast Sci (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Astronomical Sciences / Master of Teaching (MT) is designed for students interested in studying the intersections of astronomy and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Astronomical Sciences
Department of Chemical & Physical Sciences, University of Toronto Mississauga
Christina Fortes, Academic Counsellor
Web: www.utm.utoronto.ca/cps
Email: christina.fortes@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Ast Sci (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Ast Sci (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Astronomical Sciences specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Astronomical Sciences, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Specific Requirements*</th>
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| 1 to 4 | HBSc degree requirements. | • The undergraduate degree will include:
  - the specialist in Astronomical Sciences, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and
  - a minimum of 3.0 FCEs in the second teaching subject.¹
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Biochemistry (Major), Honours Bachelor of Science / Master of Teaching

UTSC Bch (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Biochemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-biochemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Bch (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Bch (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Biochemistry major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Biochemistry, which fulfills the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
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<th>Specific Requirements*</th>
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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Biochemistry, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The **Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major Co-op in Biochemistry / Master of Teaching (MT)** is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program  
University of Toronto Scarborough  
Web: [utsc.calendar.utoronto.ca/major-co-operative-program-biochemistry-science](http://utsc.calendar.utoronto.ca/major-co-operative-program-biochemistry-science)  
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program  
Ontario Institute for Studies in Education  
Web: [www.oise.utoronto.ca/mt](http://www.oise.utoronto.ca/mt)  
Email: mtinfo@utoronto.ca

UTSC Bch (Maj Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Bch (Maj Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for **conditional admission to the MT program and the CDP**, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Biochemistry major co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• In their Statement of Intent, applicants should indicate their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major co-op in Biochemistry, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  o the major co-op in Biochemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and
  o a minimum of 3.0 FCEs in the second teaching subject.¹
• By the end of Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. |
| 5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Biological Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Bio Chm (Spec) HBSc / MT: Introduction

Overview

The **Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Biological Chemistry / Master of Teaching** (MT) is designed for students interested in studying the intersections of chemistry and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Biological Chemistry
Department of Chemical & Physical Sciences, University of Toronto Mississauga
Christina Fortes, Academic Counsellor
Web: [www.utm.utoronto.ca/cps](http://www.utm.utoronto.ca/cps)
Email: christina.fortes@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: [www.oise.utoronto.ca/mt](http://www.oise.utoronto.ca/mt)
Email: mtinfo@utoronto.ca

UTM Bio Chm (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Bio Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for **conditional admission to the MT program and the CDP**, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Biological Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing to the HBSC program:
• Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
• Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

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• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Biological Chemistry, which fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
• The undergraduate degree will include:  
  o the specialist in Biological Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
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Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Biological Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

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Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-biological-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
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- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
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UTSC Bio Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

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• Be admitted to the HBSc degree program and the Biological Chemistry specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
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• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Biological Chemistry, which fulfills the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Biological Chemistry, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses (i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Biological Chemistry (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Bio Chm (Spec Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Biological Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-biological-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Bio Chm (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Bio Chm (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Biological Chemistry specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in Biological Chemistry, which fulfills the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.</td>
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| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Biology (Major), Honours Bachelor of Science / Master of Teaching

UTM Bio (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Major in Biology
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Bio (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Bio (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Biology major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.

Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.

Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.

Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Biology (Major), Honours Bachelor of Science / Master of Teaching

UTSC Bio (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Bio (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Bio (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Biology major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.

  Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
| | • The undergraduate degree will include:  
  o the major in Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program.  
| | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Biology
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program.
• Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
• Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Biology for Health Sciences (Major), Honours Bachelor of Science / Master of Teaching

UTM Bio Health Sci (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Biology for Health Sciences / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Major in Biology for Health Sciences
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Bio Health Sci (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Bio Health Sci (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Biology for Health Sciences major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Biology for Health Sciences, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  - the major in Biology for Health Sciences, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Chemistry (Major), Honours Bachelor of Science / Master of Teaching

UTM Chm (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of chemistry and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Major in Chemistry
Department of Chemical & Physical Sciences, University of Toronto Mississauga
Christina Fortes, Academic Counsellor
Web: www.utm.utoronto.ca/cps
Email: christina.fortes@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Chm (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Chm (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Chemistry major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
To be given **full, unconditional admission to the MT program**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the [Master of Teaching website](#) for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>- In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses are counted towards the completion of both the HBSc and MT degree programs.</td>
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¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Chm (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Chm (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Chemistry major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree program. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Chemistry (Major Co-op), Honours Bachelor of Science / Master of Teaching

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major Co-op in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-co-operative-program-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Chm (Maj Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Chm (Maj Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Chemistry major co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program.
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major co-op in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major co-op in Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Chm (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of chemistry and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Chemistry
Department of Chemical & Physical Sciences, University of Toronto Mississauga
Christina Fortes, Academic Counsellor
Web: www.utm.utoronto.ca/cps
Email: christina.fortes@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Chm (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program;
- Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  - the specialist in Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject;  
  - a minimum of 3.0 FCEs in the second teaching subject.  
  - By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  - In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Chm (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher's Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Chm (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Chemistry specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
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<th>Specific Requirements*</th>
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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Chemistry (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Chm (Spec Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Chm (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Chm (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Chemistry specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist co-op in Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs of Year 1 and Year 2 of the MT program. |

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.
UTM, Comparative Physiology (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Comp Psl (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Comparative Physiology / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Comparative Physiology
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Comp Psl (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Comp Psl (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Comparative Physiology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.

- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Comparative Physiology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:
  - the specialist in Comparative Physiology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and
  - a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Conservation and Biodiversity (Specialist), Honours Bachelor of Science / Master of Environmental Science

UTSC Cons Bio (Spec) HBSc / MEnvSc: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Conservation and Biodiversity / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSci program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-conservation-and-biodiversity-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Cons Bio (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Cons Bio (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Conservation and Biodiversity specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
- Be enrolled full-time and in good standing in the HBSc program.
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.

- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

- Complete the following undergraduate courses (1.0 FCE) as part of the HBSc degree requirements:
  - BIOC63H3 Conservation Biology
  - BIOD54H3 Applied Conservation Biology.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.

- Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field.
  - Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE.
  - Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE.
  - Terrestrial and Aquatic Systems field: 1.0 FCE.

- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
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</table>
| 1 to 3| • HBSc degree requirements. | • The undergraduate degree will include the specialist in Conservation and Biodiversity.  
• By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
  - Climate Change Impacts and Adaptation;  
  - Conservation and Biodiversity; or  
  - Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses  
  - BIOC63H3 Conservation Biology (0.5 FCE) and  
  - BIOD54H3 Applied Conservation Biology (0.5 FCE).  
• Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
  - Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);  
  - Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);  
  - Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | • Optional two-month academic or internship training. | • EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
| 5 | • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
  - coursework (2.0 FCEs) and internship (2.0 FCEs) or  
  - coursework (2.5 FCEs) and research paper (1.5 FCEs).  
• Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
  - internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or  
  - research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
UTSC, Conservation and Biodiversity (Major), Honours Bachelor of Science / Master of Teaching

UTSC Cons Bio (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Conservation and Biodiversity / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-conservation-and-biodiversity-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Cons Bio (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Cons Bio (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Conservation and Biodiversity major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Conservation and Biodiversity, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
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<th>Specific Requirements*</th>
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| 1 to 4| • HBSc degree requirements.  
       • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
       • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
       • The undergraduate degree will include:  
         o the major in Conservation and Biodiversity, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
         o a minimum of 3.0 FCEs in the second teaching subject.¹  
       • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
       • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. | |
| 5 and 6| • Remaining courses from Year 1 and Year 2 of the MT program.  
      • 11.0 FCEs during Year 1 and Year 2 of the MT program. | |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Conservation and Biodiversity (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Cons Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Conservation and Biodiversity / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-conservation-and-biodiversity-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Cons Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
-Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Cons Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Conservation and Biodiversity specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Conservation and Biodiversity, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
  • The undergraduate degree will include:  
    o the specialist in Conservation and Biodiversity, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject;  
    and  
    o a minimum of 3.0 FCEs in the second teaching subject. 1  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |  |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Ecology and Evolution (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Eco Evo (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Ecology and Evolution / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Ecology and Evolution
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Eco Evo (Spec) HBA / MT: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc) program, then to the MT program and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Eco Evo (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Ecology and Evolution specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HSBC program.
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Ecology and Evolution, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
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| 1 to 4 | - HBSc degree requirements.  
- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
- By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
- The undergraduate degree will include:  
  - the specialist in Ecology and Evolution, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.  
- By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
- In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |  

5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Engineering, Bachelor of Applied Science / Management, Master of Business Administration

STG Eng BASc / MBA: Introduction

Overview

The Jeffrey Skoll Combined Bachelor of Applied Science in Engineering / Management, Master of Business Administration, established by the Faculty of Applied Science and Engineering and the Rotman School of Management, provides a fast track for students to earn their bachelor's degree in engineering and an MBA in six years and eight months.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

The Jeffrey Skoll Combined Bachelor of Applied Science in Engineering / Management, Master of Business Administration
undergrad.engineering.utoronto.ca/academics-registration/skoll-bascmba-program
www.rotman.utoronto.ca/Degrees/MastersPrograms/JointDegrees/SkollMBA

Bachelor of Applied Science Program
Faculty of Applied Science and Engineering
Email: engineering@ecf.utoronto.ca

Master of Business Administration Program
Rotman School of Management
Email: mba@rotman.utoronto.ca

STG Eng BASc / MBA: Application Process

• Applicants must apply to both the BASc program and the MBA program as specified in the admission requirements.
• Applicants must gain independent admission to both the BASc and MBA programs before they may be considered for admission to the CDP.
• BASc students may apply to the CDP in Year 4.

STG Eng BASc / MBA: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the BASc program, the School of Graduate Studies, and the MBA program.
  ○ Note: graduates of the BASc program who have completed the Professional Experience Year (PEY) internship need not meet the recommended MBA admission requirement of at least two years of full-time work experience.
• Applicants need a minimum B+ average in each of the following four sessions: 2F, 2W, 3F, 3W. Students with one session slightly below B+ who meet all other entrance parameters are welcome to apply.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
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</table>
| 1 to 5 | • BASc program and degree requirements.  
• Professional Experience Year (PEY) internship.  
• Complete 20.0 full-course equivalents (FCEs) in BASc program and degree requirements  
• In Year 4, apply to the CDP and MBA programs.  
• Normally, after Year 3, complete the 16-month PEY internship in a business or not-for-profit setting. Students may opt to complete the PEY after Year 2. |                                                                                                                                                                                                                                               |
| 6 and 7 | • In Years 6 and 7, register for the MBA program and complete the MBA program requirements.  
• Students complete all the full-time MBA program requirements as detailed in the Management, Rotman School calendar entry. |                                                                                                                                                                                                                                               |
STG, English (Major), Honours Bachelor of Arts / Master of Teaching

STG Eng (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Arts, Major in English / Master of Teaching (MT) is designed for students interested in studying the intersections of English and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the Faculty of Arts and Science and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE), St. George (STG) campus. They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Honours Bachelor of Arts, Major in English / Master of Teaching
www.vic.utoronto.ca/academic-programs/upper-year-programs/combined-degree-program-in-education/

Honours Bachelor of Arts Program
Faculty of Arts and Science, Victoria College
Web: www.vic.utoronto.ca
Email: vic.academics@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Eng (Maj) HBA / MT: Application Process

- Applicants apply to the Honours Bachelor of Arts (HBA) program, then to the MT program and the CDP.
- In the Spring session of Year 3 of the HBA program, students apply for conditional admission to the MT program.

STG Eng (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the English major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA degree program:
  o Be registered in Year 3 of the HBA program.
  o Have an average grade equivalent to at least a B+, normally demonstrated by an average grade in Year 2.
• Have completed or be on course to complete the Education and Society minor program (Victoria College).
• Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 full-course equivalents [FCEs] in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in English, which fulfils the 6.0 FCEs required for English as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the minor in Education and Society;  
  o a minimum of 6.0 FCEs as part of the English major requirements, which will also qualify as prerequisite courses in the first teaching subject; and  
  a second minor, which will also qualify as the minimum of 3.0 FCEs in the second teaching subject.  
  By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, English (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Eng (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in English / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-english-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Eng (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Eng (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the English major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resume, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in English, which fulfils the 6.0 FCEs required for English as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>The undergraduate degree will include: o the major in English, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject.¹ By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science). In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs.</td>
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¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, English (Major Co-op), Honours Bachelor of Arts / Master of Teaching

UTSC Eng (Maj Co-op) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major Co-op in English / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-co-operative-program-english-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Eng (Maj Co-op) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Eng (Maj Co-op) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the English major co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major co-op in English, which fulfils the 6.0 FCEs required for English as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
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<th>Specific Requirements*</th>
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| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major co-op in English, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, English (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC Eng (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in English / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-english-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Eng (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Eng (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the English specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in English, which fulfils the 6.0 FCEs required for English as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in English, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, English (Specialist Co-op), Honours Bachelor of Arts / Master of Teaching

UTSC Eng (Spec Co-op) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist Co-op in English / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

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Honours Bachelor of Arts Program
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Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-english-arts
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Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Eng (Spec Co-op) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Eng (Spec Co-op) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the English specialist co-op program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
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  • Students should consult often with their HBA academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

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  o the specialist co-op in English, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Environmental Biology (Specialist), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Bio (Spec) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
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Environmental Biology Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-biology-science
Email: mmeriano@utsc.utoronto.ca

Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admissgrad.chemeng@utoronto.ca

UTSC Env Bio (Spec) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Biology (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Bio (Spec) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B−. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfill both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B−. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Biology (Specialist Co-op), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Bio (Spec Co-op) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
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Environmental Biology Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-biology-science
Email: mmeriano@utsc.utoronto.ca

Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admissgrad.chemeng@utoronto.ca

UTSC Env Bio (Spec Co-op) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Biology (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Bio (Spec Co-op) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Biology specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | - HBSc degree requirements.  
- By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
- Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | - Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
- In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
- In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
- In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | - Remaining MEng program requirements. | - Conditions of admission are removed.  
- Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC Env Bio (Spec) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
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Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Bio (Spec) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Biology (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Bio (Spec) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

To be given full, unconditional admission to the MEng program in Civil Engineering, applicants must meet the following admission requirements:
- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 4 | - HBSc degree requirements.  
  - By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
  - Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | - Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
  - In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
  - In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
  - In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | - Remaining MEng program requirements. | - Conditions of admission are removed.  
  - Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Biology (Specialist Co-op), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Bio (Spec Co-op) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Biology Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-biology-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Bio (Spec Co-op) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Biology (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Bio (Spec Co-op) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Biology specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Civil Engineering, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B−. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
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</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>HBSc degree requirements. By the end of Year 4, fulfill both the undergraduate program requirements and the undergraduate degree requirements. Between Years 4 and 5, eligible students may begin the MEng program in the Summer session.</td>
<td>Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year. In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program. In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements. In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B−. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.</td>
</tr>
<tr>
<td>5</td>
<td>Remaining MEng program requirements.</td>
<td>Conditions of admission are removed. Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required.</td>
</tr>
</tbody>
</table>
UTSC, Environmental Biology (Specialist), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Bio (Spec) HBSc / MEnvSc: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSci program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Env Bio (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Bio (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
Be admitted to the HBSc degree program and the Environmental Biology specialist program.
Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
Be enrolled full-time and in good standing in the HBSc program:
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
- EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program).
- EESD10Y3 Research Project in Environmental Science.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
  - Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE.
  - Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE.
  - Terrestrial and Aquatic Systems field: 1.0 FCE.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | HBSc degree requirements. | • The undergraduate degree will include the specialist in Environmental Biology.  
  • By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
    o Climate Change Impacts and Adaptation;  
    o Conservation and Biodiversity; or  
    o Terrestrial and Aquatic Systems. |
| 4 | By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:  
  o EESC24H3 Advanced Reading (0.5 FCE) and  
  o EESD10Y3 Research Project in Environmental Science (1.0 FCE).  
• Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);  
  o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);  
  o Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | Optional two-month academic or internship training. | • EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
| 5 | Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
  o coursework (2.0 FCEs) and internship (2.0 FCEs) or  
  o coursework (2.5 FCEs) and research paper (1.5 FCEs).  
• Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
  o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or  
  o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Env Bio (Spec Co-op) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Bio (Spec Co-op) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Biology specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  o EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program).
  o EESD10Y3 Research Project in Environmental Science.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE.
  o Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE.
  o Terrestrial and Aquatic Systems field: 1.0 FCE.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | • HBSc degree requirements. | • The undergraduate degree will include the specialist co-op in Environmental Biology.
• By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:
  o Climate Change Impacts and Adaptation;
  o Conservation and Biodiversity; or
  o Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP. In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:
  o EESC24H3 Advanced Reading (0.5 FCE) and
  o EESD10Y3 Research Project in Environmental Science (1.0 FCE).
• Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);
  o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);
  o Terrestrial and Aquatic Systems field: 1.0 FCE. |

Optional registration in the Summer session prior to Year 5

| Optional registration in the Summer session prior to Year 5 | • Optional two-month academic or internship training. | EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |

5

| • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:
  o coursework (2.0 FCEs) and internship (2.0 FCEs) or
  o coursework (2.5 FCEs) and research paper (1.5 FCEs).
• Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:
  o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or
  o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
UTSC, Environmental Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Env Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Biology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Environmental Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
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</table>
| 1 to 4 | • HBSc degree requirements.  
      • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
      • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
      o the specialist in Environmental Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
      o a minimum of 3.0 FCEs in the second teaching subject.1  
      • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
      • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Environmental Biology (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Bio (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Bio (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Biology specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in Environmental Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist co-op in Environmental Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject;  
  and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Environmental Chemistry Program
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Email: mmeriano@utsc.utoronto.ca

Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admisssgrad.chemeng@utoronto.ca

UTSC Env Chm (Spec) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Chemistry (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Chm (Spec) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 FCEs each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses offered by the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC Env Chm (Spec Co-op) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
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Environmental Chemistry Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-chemistry-science
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Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admisssgrad.chemeng@utoronto.ca

UTSC Env Chm (Spec Co-op) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Chemistry (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Chm (Spec Co-op) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Chemistry specialist co-op program.
- Meet the admission requirements of School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program,
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>1 to 4</td>
<td>• HBSc degree requirements. • By the end of Year 4, fulfill both the undergraduate program requirements and the undergraduate degree requirements. • Between Years 4 and 5, eligible students may begin the MEng program in the Summer session.</td>
<td>• Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year. • In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program. • In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements. • In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses offered by the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the MEng program and degree requirements.</td>
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<tr>
<td>5</td>
<td>• Remaining MEng program requirements.</td>
<td>• Conditions of admission are removed. • Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required.</td>
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UTSC, Environmental Chemistry (Specialist), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Chm (Spec) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Chm (Spec) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Chemistry (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Chm (Spec) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Civil Engineering, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | - HBSc degree requirements.  
- By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
- Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | - Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
- In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
- In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
- In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses, with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | - Remaining MEng program requirements. | - Conditions of admission are removed.  
- Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Chemistry (Specialist Co-op), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Chm (Spec Co-op) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Chm (Spec Co-op) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Chemistry (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Chm (Spec Co-op) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Chemistry specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Civil Engineering**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Chemistry (Specialist), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Chm (Spec) HBSc / MEnvSc: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Env Chm (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Chm (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Chemistry specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  o EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program);
  o EESD10Y3 Research Project in Environmental Science.

To be given **full, unconditional admission to the MEnvSc program**, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE;
  o Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE;
  o Terrestrial and Aquatic Systems field: 1.0 FCE.
• Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Progression</th>
<th>Specific Requirements</th>
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</table>
| 1 to 3 | • HBSc degree requirements. | • The undergraduate degree will include the specialist in Environmental Chemistry.  
  • By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
    o Climate Change Impacts and Adaptation;  
    o Conservation and Biodiversity; or  
    o Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:  
  o EESC24H3 Advanced Reading (0.5 FCE) and  
  o EESD10Y3 Research Project in Environmental Science (1.0 FCE).  
  • Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
    o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);  
    o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);  
    o Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | • Optional two-month academic or internship training. | • EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
| 5 | • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
  o coursework (2.0 FCEs) and internship (2.0 FCEs) or  
  o coursework (2.5 FCEs) and research paper (1.5 FCEs).  
  • Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
    o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or  
    o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

• early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
• addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
• the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
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Email: gisela.bento@utoronto.ca

UTSC Env Chm (Spec Co-op) HBSc / MEnvSc: Application Process

• Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
• Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Chm (Spec Co-op) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Chemistry specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
• Be enrolled full-time and in good standing in the HBSc program:
  • Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  • Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  o EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program);
  o EESD10Y3 Research Project in Environmental Science.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;
• Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field.
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE.
  o Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE.
  o Terrestrial and Aquatic Systems field: 1.0 FCE.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3</td>
<td>HBSc degree requirements.</td>
<td>The undergraduate degree will include the specialist co-op in Environmental Chemistry. By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application: o Climate Change Impacts and Adaptation; o Conservation and Biodiversity; or o Terrestrial and Aquatic Systems.</td>
</tr>
<tr>
<td>4</td>
<td>By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP. In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.</td>
<td>Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses: o EESC24H3 Advanced Reading (0.5 FCE) and o EESD10Y3 Research Project in Environmental Science (1.0 FCE). Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows: o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE); o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE); o Terrestrial and Aquatic Systems field: 1.0 FCE.</td>
</tr>
<tr>
<td>Optional registration in the Summer session prior to Year 5</td>
<td>Optional two-month academic or internship training.</td>
<td>EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE).</td>
</tr>
<tr>
<td>5</td>
<td>Remaining courses from Year 1 and Year 2 of the MEnvSc program.</td>
<td>Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows: o coursework (2.0 FCEs) and internship (2.0 FCEs) or o coursework (2.5 FCEs) and research paper (1.5 FCEs). Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows: o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs).</td>
</tr>
</tbody>
</table>
UTSC, Environmental Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Chm (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
- Be admitted to the HBSc degree program and the Environmental Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given **full, unconditional admission to the MT program**, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Environmental Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the [Master of Teaching website](#) for more information.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>1 to 4</td>
<td>HBS c degree requirements. &lt;br&gt; In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. &lt;br&gt; By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.</td>
<td>The undergraduate degree will include: &lt;br&gt; the specialist in Environmental Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and &lt;br&gt; a minimum of 3.0 FCEs in the second teaching subject.¹ &lt;br&gt; By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science). &lt;br&gt; In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>Remaining courses from Year 1 and Year 2 of the MT program.</td>
<td>11.0 FCEs during Year 1 and Year 2 of the MT program.</td>
</tr>
</tbody>
</table>

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the [MT calendar entry](#).
UTSC, Environmental Chemistry (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-chemistry-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Chm (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Chm (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Chemistry specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in Environmental Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
| • The undergraduate degree will include:  
  o the specialist co-op in Environmental Chemistry, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
| • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
| • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).  
| 5 and 6 | • Remaining courses from Year 1 of the MT program.  
| • 11.0 FCEs during Year 1 and Year 2 of the MT program.  

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Environmental Geoscience (Specialist), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Geo (Spec) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Geoscience Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-geoscience-science
Email: mmeriano@utsc.utoronto.ca

Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admissgrad.chemeng@utoronto.ca

UTSC Env Geo (Spec) HBSc / Chem MEng: Application Process

• UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Geoscience (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
• Qualified UTSC students will be able to apply to the CDP.
• UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Geo (Spec) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBSc program and Environmental Geoscience specialist program.
• Meet the admission requirements of School of Graduate Studies and the MEng program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (CGPA of 3.3) or higher in Year 2;
  o Carry a full course load of 5.0 FCEs each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of completing up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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</table>
| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Geoscience (Specialist Co-op), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Geo (Spec Co-op) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Geoscience Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-geoscience-science
Email: mmeriano@utsc.utoronto.ca

Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
Web: chem-eng.utoronto.ca/graduate-studies/programs-degrees/professional-degree-master-of-engineering-meng
Email: admissgrad.chemeng@utoronto.ca

UTSC Env Geo (Spec Co-op) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Geoscience (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Geo (Spec Co-op) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Geoscience specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Geoscience (Specialist), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Geo (Spec) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Geoscience Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-geoscience-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Geo (Spec) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Geoscience (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Geo (Spec) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Geoscience specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Civil Engineering, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 credit in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Geoscience (Specialist Co-op), Honours Bachelor of Science / Civil Engineering, Master of Engineering

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Geoscience Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-geoscience-science
Email: mmeriano@utsc.utoronto.ca

Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Geo (Spec Co-op) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Geoscience (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Geo (Spec Co-op) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Geoscience specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Civil Engineering**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 4 | HBSc degree requirements.  
By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | Remaining MEng program requirements. | Conditions of admission are removed.  
Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-geoscience-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Env Geo (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Geo (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
Be admitted to the HBSc degree program and the Environmental Geoscience specialist program.

Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.

Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
- EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program);
- EESD10Y3 Research Project in Environmental Science.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;

Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
- Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE;
- Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE;
- Terrestrial and Aquatic Systems field: 1.0 FCE.

Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
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<tbody>
<tr>
<td>1 to 3</td>
<td>HBSc degree requirements.</td>
<td>The undergraduate degree will include the specialist in Environmental Geoscience. By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application: ○ Climate Change Impacts and Adaptation; ○ Conservation and Biodiversity; or ○ Terrestrial and Aquatic Systems.</td>
</tr>
</tbody>
</table>

4 | By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP. In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses: ○ EESC24H3 Advanced Reading (0.5 FCE) and ○ EESD10Y3 Research Project in Environmental Science (1.0 FCE). Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows: ○ Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE); ○ Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE); ○ Terrestrial and Aquatic Systems field: 1.0 FCE. |

Optional registration in the Summer session prior to Year 5 | Optional two-month academic or internship training. | EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |

5 | Remaining courses from Year 1 and Year 2 of the MEnvSc program. | Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows: ○ coursework (2.0 FCEs) and internship (2.0 FCEs) or ○ coursework (2.5 FCEs) and research paper (1.5 FCEs). Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows: ○ internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or ○ research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSci program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-geoscience-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
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UTSC Env Geo (Spec Co-op) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Geo (Spec Co-op) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Geoscience specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  o EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program);
  o EESD10Y3 Research Project in Environmental Science.

To be given **full, unconditional admission to the MEnvSc program**, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;
• Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE;
  o Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE;
  o Terrestrial and Aquatic Systems field: 1.0 FCE.
• Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | • HBSc degree requirements. | • The undergraduate degree will include the specialist co-op in Environmental Geoscience.  
• By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
  o Climate Change Impacts and Adaptation;  
  o Conservation and Biodiversity; or  
  o Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:  
  o EESC24H3 Advanced Reading (0.5 FCE) and  
  o EESD10Y3 Research Project in Environmental Science (1.0 FCE).  
• Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);  
  o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);  
  o Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | • Optional two-month academic or internship training. | • EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
| 5 | • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
  o coursework (2.0 FCEs) and internship (2.0 FCEs) or  
  o coursework (2.5 FCEs) and research paper (1.5 FCEs).  
• Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
  o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or  
  o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
UTM, Environmental Management (Major), Honours Bachelor of Arts / Sustainability Management, Master of Science

UTM Env Mgt (Maj) HBA / MScSM: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Major in Environmental Management / Master of Science in Sustainability Management allows students to complete an undergraduate degree with an early conditional admission offer to the Master of Science in Sustainability Management (MScSM) program in their final year of study.

Although there is no acceleration in time to completion in this CDP, students will benefit from early admission to the MScSM program, early exposure to graduate-level courses, and a reduced course load while completing their MScSM degree.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Sabrina Ferrari, Undergraduate Academic Counsellor
UTM, Honours Bachelor of Arts, Major in Environmental Management / Master of Science in Sustainability Management
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Environmental Management Program
University of Toronto Mississauga
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Email: sabrina.ferrari@utoronto.ca

Rose Mary Craig, Program Coordinator
Master of Science in Sustainability Management Program
Institute for Management and Innovation
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Email: mscsm.utm@utoronto.ca

UTM Env Mgt (Maj) HBA / MScSM: Application Process

- Applicants apply to the Honours Bachelor of Arts (HBA) program, the MScSM program, and the CDP.
- Applicants must gain independent admission to both the HBA and MScSM programs before they may be considered for admission to the CDP.
- Applicants apply to the CDP at the end of Year 3 of undergraduate study.
- Applicants apply and interview for early conditional admission to the MScSM program.

UTM Env Mgt (Maj) HBA / MScSM: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MScSM program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Environmental Management major program.
- Meet the admission requirements of the School of Graduate Studies and the MScSM program.
- Be enrolled full-time and in good standing in the HBA program:
  - Have either completed or are currently enrolled in a minimum of 15.0 total full-course equivalents (FCEs).
  - Have a minimum annual grade point average (AGPA) of 3.7 in their most recent 5.0 FCEs.
To be given full, unconditional admission to the MScSM program, applicants must meet the following admission requirements:

- Be conferred with the HBA degree.
- Successfully complete 1.0 graduate FCE in MScSM courses.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1    | Normally, 5.0 full-course equivalents (FCEs) towards the HBA program requirements. | Students must complete a minimum of 2.0 FCEs in core courses:  
  - Introduction: ENV100Y5 (1.0 FCE).  
  - Foundation: 1.0 FCE chosen from ANT102H5, ECO100Y5, GGR111H5, PHL105Y5, POL112H5, POL113H5, POL114H5, SOC100H5. |
| 2    | Normally, 5.0 FCEs towards the HBA program requirements. | Students must complete a minimum of 2.5 FCEs in core courses:  
  - Environmental Management: ENV201H5 (0.5 FCE).  
  - Social Science/Humanities: 1.0 FCE chosen from ANT204Y5, ANT241Y5, ENG259H5, ENV250Y5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR278H5, GGR288H5, PHL273H5.  
  - Science: 0.5 FCE chosen from BIO205H5, ERS201H5, GGR214H5, GGR217H5, GGR227H5, PHY237H5.  
  - Analytical and Research Methods: 0.5 FCE chosen from GGR276H5, GGR277H5, GGR278H5, STA220H5, or another program-relevant 200/300-level research methods course, with the program advisor's permission. |
| 3 and 4 | Normally, 5.0 FCEs each year towards the HBA program requirements.  
In order to be eligible for the CDP, students must have completed a minimum of 15.0 FCEs by the end of Year 3.  
Students must complete all HBA program requirements (20.0 FCEs) by the end of Year 4, in order to fulfill the conditions of the MScSM offer. | Students must complete a minimum of 3.5 FCEs in core courses:  
  - Environmental Management Perspectives: 1.0 FCE chosen from ANT357H5, ENV310H5, ENV393H5, HIS318H5, HIS319H5.  
  - Social, Economic, and Policy Perspectives: 1.5 FCEs chosen from ANT357H5, ANT368H5, ANT370H5, ECO373H5, ENV310H5, ENV320H5, ENV345H5, ENV351H5, ENV420H5, ENV425H5, ENV452H5, GGR318H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR425H5, GGR426H5, JGE378H5, MGT394H5, PHL373H1, POL343Y5, SOC339H5, SOC349H5, SOC356H5, WRI375H5.  
  - Scientific Perspectives: 0.5 FCE chosen from BIO333H5, BIO464H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR337H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5, JGE378H5, SCI395H5, SCI396H5.  
  - Field, Project-Based, and Research Perspectives: 0.5 FCE chosen from ENV299Y5, ENV331H5, ENV332H5, ENV399Y5, GGR379H5, GGR389H5, JEG400Y5, JEG401Y5, or another program-relevant field, experiential, or research course, with the program advisor's permission.  
  - Students apply to the CDP and MScSM program at the end of Year 3. Students accepted to the CDP will receive a conditional offer of admission to the MScSM program.  
  - In Year 4, students complete 1.0 FCE in MScSM courses, chosen from EES1124H, EES1125H, ENV1002H, ENV1704H, ENV1707H, SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H, or another program-relevant graduate course with the MScSM program director's permission. |
| 5 and 6 | • Students complete all MScSM program requirements with advanced standing of 1.0 FCE granted.  
• Students complete an additional 8.0 FCEs towards the MScSM program requirements.  
• Conditions of admission to the MScSM program are removed.  
• Exact courses will vary based on the 1.0 FCE completed in Year 4.  
• **5.0 to 6.0 FCEs in core courses:** SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM1090H, SSM1100Y, SSM1110H.  
• **2.0 to 3.0 FCEs in elective courses:** examples include:  
  o Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H.  
• The **internship placement** (SSM1110H) will range from 2 to 4 months in length. |
UTM, Environmental Management (Specialist), Honours Bachelor of Arts / Sustainability Management, Master of Science

UTM Env Mgt (Spec) HBA / MScSM: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Specialist in Environmental Management / Master of Science in Sustainability Management allows students to complete an undergraduate degree with an early conditional admission offer to the Master of Science in Sustainability Management (MScSM) program in their final year of study.

Although there is no acceleration in time to completion in this CDP, students will benefit from early admission to the MScSM program, early exposure to graduate-level courses, and a reduced course load while completing their MScSM degree.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Environmental Management Program
University of Toronto Mississauga
Web: www.utm.utoronto.ca/environment/academic-programs/environmental-management
Email: sabrina.ferrari@utoronto.ca

Rose Mary Craig, Program Coordinator
Master of Science in Sustainability Management Program
Institute for Management and Innovation
Web: www.utm.utoronto.ca/mscsm/mscsm-program-overview
Email: mscsm.utm@utoronto.ca

UTM Env Mgt (Spec) HBA / MScSM: Application Process

- Applicants apply to the Honours Bachelor of Arts (HBA) program, the MScSM program, and the CDP.
- Applicants must gain independent admission to both the HBA and MScSM programs before they may be considered for admission to the CDP.
- Applicants apply to the CDP at the end of Year 3 of undergraduate study.
- Applicants apply and interview for early conditional admission to the MScSM program.

UTM Env Mgt (Spec) HBA / MScSM: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MScSM program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Environmental Management specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MScSM program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have either completed or are currently enrolled in a minimum of 15.0 total full-course equivalents (FCEs).
  o Have a minimum annual grade point average (AGPA) of 3.7 in their most recent 5.0 FCEs.

To be given **full, unconditional admission to the MScSM program**, applicants must meet the following admission requirements:

• Be conferred with the HBA degree.
• Successfully complete 1.0 graduate FCE in MScSM courses.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1    | Normally, 5.0 full-course equivalents (FCEs) towards the HBA program requirements. | Students must complete a minimum of **3.0 FCEs** in core courses:
  o Introduction: ENV100Y5 (1.0 FCE).
  o Economics: ECO100Y5 (1.0 FCE).
  o Foundation: 1.0 FCE chosen from ANT102H5, GGR111H5, PHL105Y5, POL112H5, POL113H5, POL114H5, SOC100H5. |
| 2    | Normally, 5.0 FCEs towards the HBA program requirements. | Students must complete a minimum of **4.0 FCEs** in core courses:
  o Environmental Management: ENV201H5 (0.5 FCE).
  o Social Science/ Humanities: 1.5 FCEs chosen from ANT204Y5, ANT241Y5, ECO200Y5, ENG259H5, ENV250Y5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR287H5, GGR288H5, MAT102H5, MAT133Y5, MAT134Y5, MAT135Y5, PHL273H5.
  o Science: 1.0 FCE chosen from BIO201H5, BIO205H5, ERS201H5, ERS202H5, ERS203H5, GGR201H5, GGR214H5, GGR217H5, GGR227H5, PHY237H5.
  o Statistics: 0.5 FCE chosen from GGR276H5, STA220H5, or other 200/300-level statistics course with the program advisor’s permission.
  o Analytical and Research Methods: 0.5 FCE chosen from GGR277H5, GGR278H5, STA221H5, or another program-relevant 200/300-level research methods course, with the program advisor’s permission. |
| 3 and 4 | Normally, 5.0 FCEs each year towards the HBA program requirements. | Students must complete a minimum of **5.0 FCEs** in core courses:
  o Environmental Management Perspectives: 1.5 FCEs chosen from ANT357H5, ENV310H5, ENV395H5, HIS308H5, HIS319H5.
  o Social, Economic, and Policy Perspectives: 2.0 FCEs chosen from ANT357H5, ANT368H5, ANT380H5, ECO373Y5, ENV320H5, ENV345H5, ENV351H5, ENV420H5, ENV425H5, ENV452H5, GGR318H5, GGR321H1, GGR329H5, GGR333H5, GGR348H5, GGR394H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR426H5, GGR493H5, JGE378H5, JUG320H1, MGT395H5, PHL373H1, POL343Y5, SOC339H5, SOC349H5, SOC356H5, WR1375H5.
  o Scientific Perspectives: 0.5 FCE chosen from BIO333H5, BIO464H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR337H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5, JGE378H5, SCI395H5, SCI396H5.
  o Field, Project-Based, and Research Perspectives: 1.0 FCE chosen from ENV299Y5, ENV331H5, ENV332H5, ENV399Y5, ENV497H5, ENV498Y5, GGR379H5, GGR389H5, JEG400Y5, JEG401Y5, SCI498H5, SCI499H5, or another program-relevant field, experiential, or research course, with the program advisor’s permission. |
| | In order to be eligible for the CDP, students must have completed a minimum of 15.0 FCEs by the end of Year 3. Students must complete all HBA program requirements (20.0 FCEs) by the end of Year 4, in order to fulfil the conditions of the MScSM offer. | Students must apply to the CDP and the MScSM program at the end of Year 3. Students accepted to the CDP will receive a conditional offer of admission to the MScSM program. |
| | Students apply to the CDP and the MScSM program at the end of Year 3. Students accepted to the CDP will receive a conditional offer of admission to the MScSM program. | In Year 4, students complete **1.0 FCE** in MScSM courses, chosen from EES1124H, EES1125H, ENV1002H, ENV1704H, ENV1707H, SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H, or another program-relevant graduate course with the MScSM director’s permission. |
Once accepted into the CDP, students will work with the MScSM director to choose appropriate graduate-level courses to complete during their final undergraduate year.

<table>
<thead>
<tr>
<th>5 and 6</th>
<th>Conditions of admission to the MScSM program are removed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students complete all MScSM program requirements with advanced standing of 1.0 FCE granted.</td>
<td>Exact courses will vary based on the 1.0 FCE completed in Year 4.</td>
</tr>
<tr>
<td>Students complete an additional 8.0 FCEs towards the MScSM program requirements.</td>
<td><strong>5.0 to 6.0 FCEs in core courses:</strong> SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM1090H, SSM1100Y, SSM1110H.</td>
</tr>
<tr>
<td><strong>2.0 to 3.0 FCEs in elective courses:</strong> examples include:</td>
<td></td>
</tr>
<tr>
<td>The internship placement (SSM1110H) will range from 2 to 4 months in length.</td>
<td></td>
</tr>
</tbody>
</table>
UTSC, Environmental Physics (Specialist), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Phy (Spec) HBSc / Chem MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Chemical Engineering and Applied Chemistry Program
Faculty of Applied Science and Engineering
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UTSC Env Phy (Spec) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Physics (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Phy (Spec) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Physics specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
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</table>
| 1 to 4 | • HBSc degree requirements.  
• By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Physics (Specialist Co-op), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Chemical Engineering and Applied Chemistry, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Email: admisssgrad.chemeng@utoronto.ca

UTSC Env Phy (Spec Co-op) HBSc / Chem MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Physics (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Phy (Spec Co-op) HBSc / Chem MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Physics specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Chemical Engineering and Applied Chemistry, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | HBSc degree requirements.  
By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. |
| Specific Requirements |
| Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Chemical Engineering and Applied Chemistry Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | Remaining MEng program requirements. |
| Specific Requirements |
| Conditions of admission are removed.  
Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Physics (Specialist), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Phy (Spec) HBSc / Civ MEng: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Email: graduateadmissions@civ.utoronto.ca

UTSC Env Phy (Spec) HBSc / Civ MEng: Application Process

- UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Physics (Specialist) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
- Qualified UTSC students will be able to apply to the CDP.
- UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Phy (Spec) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc program and Environmental Physics specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEng program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given full, unconditional admission to the MEng program in Civil Engineering, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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• Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program must complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program may complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Civil Engineering, Master of Engineering is a five-year program. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

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Civil Engineering Program
Faculty of Applied Science and Engineering
Web: civmin.utoronto.ca/home/programs/graduate-programs/meng
Email: graduateadmissions@civ.utoronto.ca

UTSC Env Phy (Spec Co-op) HBSc / Civ MEng: Application Process

• UTSC students in Year 3 of the Honours Bachelor of Science (HBSc) program in Environmental Physics (Specialist Co-op) who are interested in the CDP must contact Professor M. Meriano before the end of the Fall session.
• Qualified UTSC students will be able to apply to the CDP.
• UTSC students who are accepted to the CDP will receive a conditional offer to start the Master of Engineering (MEng) program upon completion of their HBSc program requirements.

UTSC Env Phy (Spec Co-op) HBSc / Civ MEng: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEng program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBSc program and Environmental Physics specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MEng program.
• Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
To be given **full, unconditional admission to the MEng program in Civil Engineering**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program.
- Complete two prescribed undergraduate engineering half courses (1.0 FCE) as part of the HBSc degree requirements.
- Students who choose the option of taking up to 1.0 FCE in graduate courses in Year 4 must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
         • By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements.  
         • Between Years 4 and 5, eligible students may begin the MEng program in the Summer session. | • Students are expected to carry a course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the CDP and may be offered conditional admission to the MEng program.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **must** complete 1.0 FCE in prescribed undergraduate engineering courses offered by the Faculty of Applied Science and Engineering. These courses can be counted towards the completion of the HBSc degree requirements.  
• In Year 4, students who receive a conditional offer of admission to the CDP and MEng program **may** complete up to 1.0 FCE in graduate courses with the permission of the Civil Engineering Department; students are graded as graduate students and must achieve a minimum grade of B–. These courses can be counted towards the completion of the HBSc degree requirements and the MEng program and degree requirements. |
| 5 | • Remaining MEng program requirements. | • Conditions of admission are removed.  
• Complete 5.0 FCEs in MEng courses. Students who have completed up to 1.0 FCE in MEng courses in Year 4 may subtract those courses from the total 5.0 FCEs required. |
UTSC, Environmental Physics (Specialist), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Phy (Spec) HBSc / MEnvSc: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Master of Environmental Science
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Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-physics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Env Phy (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Phy (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:
- Be admitted to the HBSc degree program and the Environmental Physics specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  - EESC24H3 *Advanced Reading* (can be taken in Year 3 of the HBSc program);
  - EESD10Y3 *Research Project in Environmental Science*.

To be given **full, unconditional admission to the MEnvSc program**, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;
- Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field:
  - Climate Change Impacts and Adaptation field: EES1133H *Climate Change Science and Modelling* plus an additional 0.5 FCE;
  - Conservation and Biodiversity field: EES3002H *Conservation Policy* plus an additional 0.5 FCE;
  - Terrestrial and Aquatic Systems field: 1.0 FCE.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
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<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | • HBSc degree requirements. | • The undergraduate degree will include the specialist in Environmental Physics.  
- By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
  - Climate Change Impacts and Adaptation;  
  - Conservation and Biodiversity; or  
  - Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP  
- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:  
  - EESC24H3 *Advanced Reading* (0.5 FCE) and  
  - EESD10Y3 *Research Project in Environmental Science* (1.0 FCE).  
- Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
  - Climate Change Impacts and Adaptation field: EES1133H *Climate Change Science and Modelling* (0.5 FCE) plus an elective (0.5 FCE);  
  - Conservation and Biodiversity field: EES3002H *Conservation Policy* (0.5 FCE) plus an elective (0.5 FCE);  
  - Terrestrial and Aquatic Systems field: 1.0 FCE. |

**Optional registration in the Summer session prior to Year 5**  
- Optional two-month academic or internship training.  
- EES4001H *Internship Training 1* (0.5 FCE) or EES4003H *Academic Training 1* (0.5 FCE).

| 5 | • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
  - coursework (2.0 FCEs) and internship (2.0 FCEs) or  
  - coursework (2.5 FCEs) and research paper (1.5 FCEs).  
- Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
  - internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or  
  - research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
UTSC, Environmental Physics (Specialist Co-op), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Phy (Spec Co-op) HBSc / MEnvSc: Introduction

Overview

The **Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Master of Environmental Science** (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Master of Environmental Science
Web: [utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science](http://utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science)

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: [utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-physics-science](http://utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-physics-science)
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: [utsc.utoronto.ca/gradpes/programs-menvsc-0](http://utsc.utoronto.ca/gradpes/programs-menvsc-0)
Email: gisela.bento@utoronto.ca

UTSC Env Phy (Spec Co-op) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.

UTSC Env Phy (Spec Co-op) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for **conditional admission to the MEnvSc program and the CDP**, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Environmental Physics specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Complete the following undergraduate courses (1.5 FCEs) as part of the HBSc degree requirements:
  o EESC24H3 Advanced Reading (can be taken in Year 3 of the HBSc program);
  o EESD10Y3 Research Project in Environmental Science.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:
• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;
• Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field.
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE;
  o Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE;
  o Terrestrial and Aquatic Systems field: 1.0 FCE.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | • HBSc degree requirements. | • The undergraduate degree will include the specialist co-op in Environmental Physics.
• By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:
  o Climate Change Impacts and Adaptation;
  o Conservation and Biodiversity; or
  o Terrestrial and Aquatic Systems. |
| 4 | • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | • Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:
  o EESC24H3 Advanced Reading (0.5 FCE) and
  o EESD10Y3 Research Project in Environmental Science (1.0 FCE).
• Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:
  o Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an elective (0.5 FCE);
  o Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);
  o Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | • Optional two-month academic or internship training. | EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
| 5 | • Remaining courses from Year 1 and Year 2 of the MEnvSc program. | • Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:
  o coursework (2.0 FCEs) and internship (2.0 FCEs) or
  o coursework (2.5 FCEs) and research paper (1.5 FCEs).
• Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:
  o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or
  o research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
UTSC, Environmental Physics (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Env Phy (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

• early application to the MT program (in Year 3) and conditional admission to the MT program;
• eligibility for certification as a teacher in Ontario; and
• eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-physics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Phy (Spec) HBSc / MT: Application Process

• Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
• Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Phy (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBSc degree program and the Environmental Physics specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Complete the requirements of their HBSc program.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Environmental Physics, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements. In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include: o the specialist in Environmental Physics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and o a minimum of 3.0 FCEs in the second teaching subject. ¹ 
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science). 
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC Env Phy (Spec Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher's Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-physics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Env Phy (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Env Phy (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Environmental Physics specialist co-op program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist co-op in Environmental Physics, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.

  Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.

- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements.  
      • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
      • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
      o the specialist co-op in Environmental Physics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
      o a minimum of 3.0 FCEs in the second teaching subject.¹  
      • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
      • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Environmental Science / Master of Science in Sustainability Management (MScSM) allows students to complete an undergraduate degree with an early conditional admission offer to the Master of Science in Sustainability Management program in their final year of study.

Although there is no acceleration in time to completion in this CDP, students will benefit from early admission to the MScSM program, early exposure to graduate-level courses, and a reduced course load while completing their MScSM.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTM, Honours Bachelor of Science, Major in Environmental Science / Master of Science in Sustainability Management

Sabrina Ferrari, Undergraduate Academic Counsellor
Environmental Science Program
University of Toronto Mississauga
Web: www.utm.utoronto.ca/environment/academic-programs/environmental-science
Email: sabrina.ferrari@utoronto.ca

Rose Mary Craig, Program Coordinator
Master of Science in Sustainability Management Program
Institute for Management and Innovation
Web: www.utm.utoronto.ca/mscsm/mscsm-program-overview
Email: mscsm.utm@utoronto.ca

UTM Env Sci (Maj) HBSc / MScSM: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc), the MScSM program, and the CDP.
- Applicants must gain independent admission to both the HBSc and MScSM programs before they may be considered for admission to the CDP.
- Applicants apply to the CDP at the end of Year 3 of undergraduate study.
- Applicants apply and interview for early conditional admission to the MScSM program.

UTM Env Sci (Maj) HBSc / MScSM: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MScSM program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Environmental Science major program.
- Meet the admission requirements of the School of Graduate Studies and the MScSM program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have either completed or are currently enrolled in a minimum of 15.0 total full-course equivalents (FCEs).
  - Have a minimum annual grade point average (AGPA) of 3.7 in their most recent 5.0 FCEs.
To be given **full, unconditional admission to the MScSM program**, applicants must meet the following admission requirements:

- Be conferred with the HBSc degree.
- Successfully complete 1.0 graduate FCE in MScSM courses.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1    | Normally, 5.0 full-course equivalents (FCEs) towards the HBSc program requirements. | Students must complete a minimum of 3.0 FCEs in core courses:  
  - Introduction: ENV100Y5 (1.0 FCE).  
  - Quantitative and Basic Science Foundation: 2.0 FCEs chosen from BIO152H5, BIO153H5, CHM110H5, CHM120H5, ERS120H5, GGR112H5, MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, PHY136H5, PHY137H5. |
| 2    | Normally, 5.0 FCEs towards the HBSc program requirements. | Students must complete a minimum of 2.5 FCEs in core courses:  
  - Environmental Management: ENV201H5 (0.5 FCE).  
  - Biological and Ecological Perspectives: 0.5 FCE chosen from BIO202H5, BIO203H5, BIO205H5, BIO206H5.  
  - Geographical Perspectives: 0.5 FCE chosen from GGR201H5, GGR214H5, GGR217H5, GGR227H5.  
  - Physical and Chemical Perspectives: 0.5 FCE chosen from CHM231H5, CHM242H5, ERS201H5, JCP221H5, PHY237H5.  
  - Analytical and Research Methods: 0.5 FCE chosen from BIO360H5, CHM211H5, GGR276H5, STA220H5, or another program-relevant 200/300-level research methods course (SCI) with the program advisor’s permission. |
| 3 and 4 | Normally, 5.0 FCEs each year towards the HBSc program requirements.  
  - In order to be eligible for the CDP, students must have completed a minimum of 15.0 FCEs by the end of Year 3.  
  - Students must complete all HBSc program requirements (20.0 FCEs) by the end of Year 4, in order to fulfill the conditions of the MScSM offer. | Students must complete a minimum of 2.5 FCEs in core courses:  
  - Environmental Science: ENV330H5 (0.5 FCE).  
  - Field, Project-Based, and Research Perspectives: 0.5 FCE chosen from ANT318H5, BIO331H5, BIO329H5, BIO416H5, ERS325H5, ENV229Y5, ENV321H5, ENV322H5, ENV399Y5, GGR379H5, JEG400Y5, JEG401Y5, SCI395H5, SCI396H5, SCI498H5, SCI499H5, or another program-relevant field course (SCI) with the program advisor’s permission.  
  - Biogeochemical Perspectives: 1.0 FCE chosen from BIO311H5, BIO312H5, BIO318Y5, BIO328H5, BIO330H5, BIO333H5, BIO373H5, BIO405H5, BIO406H5, BIO436H5, BIO464H5, CHM310H5, CHM311H5, CHM331H5, CHM333H5, CHM347H5, CHM361H5, CHM362H5, CHM391H5, CHM393H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR312H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR372H5, GGR374H5, GGR377H5, GGR403H1, GGR406H5, GGR407H5, GGR409H1, GGR413H1, GGR463H5, GGR465H5, GGR479H5, JEG378H5, PHY331H5.  
  - Social, Economic, and Policy Perspectives: 0.5 FCE chosen from ANT357H5, ANT368H5, ECO373Y5, ENV250Y5, ENV310H5, ENV320H5, ENV345H5, ENV393H5, ENV420H5, ENV425H5, GGR318H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR420H5, HIS318H5, HIS319H5, JEG378H5, MGT339H5, MGT255H5, PHL255H5, PHL273H5, PHL373H1, POL343Y5, SOC226H5, SOC339H5, SOC356H5, WRI375H5. |

Students apply to the CDP and the MScSM program at the end of Year 3. Students accepted to the CDP will receive a conditional offer of admission to the MScSM program.
In Year 4, students complete 1.0 FCE in MScSM courses, chosen from EES1124H, EES1125H, ENV1002H, ENV1704H, ENV1707H, SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H, or another program-relevant graduate course with the MScSM director's permission.

Once accepted into the CDP, students will work with the MScSM director to choose appropriate graduate-level courses to complete during their final undergraduate year.

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<thead>
<tr>
<th>5 and 6</th>
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<tbody>
<tr>
<td>- Students complete all MScSM program requirements with advanced standing of 1.0 FCE granted.</td>
<td>- Conditions of admission to the MScSM program are removed.</td>
</tr>
<tr>
<td>- Students complete an additional 8.0 FCEs towards the MScSM program requirements.</td>
<td>- Exact courses will vary based on the 1.0 FCE completed in Year 4.</td>
</tr>
<tr>
<td></td>
<td>5.0 to 6.0 FCEs in core courses: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM1090H, SSM1100Y, SSM1110H.</td>
</tr>
<tr>
<td></td>
<td>2.0 to 3.0 FCEs in elective courses; examples include:</td>
</tr>
<tr>
<td></td>
<td>o Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H.</td>
</tr>
<tr>
<td></td>
<td>The internship placement (SSM1110H) will range from two to four months in length.</td>
</tr>
</tbody>
</table>
UTM, Environmental Science (Specialist), Honours Bachelor of Science / Sustainability Management, Master of Science

UTM Env Sci (Spec) HBSc / MScSM: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Environmental Science / Master of Science in Sustainability Management (MScSM) allows students to complete an undergraduate degree with an early conditional admission offer to the MScSM program in their final year of study.

Although there is no acceleration in time to completion in this CDP (the program length remains at four years for the HBSc and 20 months for the MScSM), students will benefit from early admission to the MScSM program, early exposure to graduate-level courses, and a reduced course load while completing their MScSM.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTM, Honours Bachelor of Science, Specialist in Environmental Science / Master of Science in Sustainability Management

Sabrina Ferrari, Undergraduate Academic Counsellor
Environmental Science Program
University of Toronto Mississauga
Web: www.utm.utoronto.ca/environment/academic-programs/environmental-science
Email: sabrina.ferrari@utoronto.ca

Rose Mary Craig, Program Coordinator
Master of Science in Sustainability Management Program
Institute for Management and Innovation
Web: www.utm.utoronto.ca/mscsm/mscsm-program-overview
Email: mscsm.utm@utoronto.ca

UTM Env Sci (Spec) HBSc / MScSM: Application Process

• Applicants apply to the Honours Bachelor of Science (HBSc) program, the MScSM program, and the CDP.
• Applicants must gain independent admission to both the HBSc and MScSM programs before they may be considered for admission to the CDP.
• Applicants apply to the CDP at the end of Year 3 of undergraduate study.
• Applicants apply and interview for early conditional admission to the MScSM program.

UTM Env Sci (Spec) HBSc / MScSM: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MScSM program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBSc degree program and the Environmental Science specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MScSM program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have either completed or are currently enrolled in a minimum of 15.0 total full-course equivalents (FCEs);
  o Have a minimum annual grade point average (AGPA) of 3.7 in their most recent 5.0 FCEs.
To be given **full, unconditional admission to the MScSM program**, applicants must meet the following admission requirements:

- Be conferred with the HBSc degree.
- Successfully complete 1.0 graduate FCE in MScSM courses.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1    | Normally, 5.0 full-course equivalents (FCEs) towards the HBSc program requirements. | Students must complete a minimum of 4.0 FCEs in core courses:  
  - Introduction: ENV100Y5 (1.0 FCE).  
  - Quantitative and Basic Science Foundation: 3.0 FCEs chosen from BIO152H5, BIO153H5, CHM110H5, CHM120H5, ERS120H5, MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, PHY136H5, PHY137H5. |
| 2    | Normally, 5.0 FCEs towards the HBSc program requirements. | Students must complete a minimum of 4.0 FCEs in core courses:  
  - Environmental Management: ENV201H5 (0.5 FCE).  
  - Biological and Ecological Perspectives: 0.5 FCE chosen from BIO202H5, BIO203H5, BIO205H5, BIO206H5.  
  - Geographical Perspectives: 0.5 FCE chosen from GGR201H5, GGR214H5, GGR217H5, GGR227H5.  
  - Earth Science Perspectives: ERS201H5 (0.5 FCE).  
  - Physical and Chemical Perspectives: 1.0 FCE chosen from CHM231H5, CHM242H5, ERS202H5, ERS203H5, JCP221H5, PHY237H5.  
  - Analytical and Research Methods: 0.5 FCE chosen from CHM231H5, CHM242H5, ERS202H5, ERS203H5, JCP221H5, PHY237H5.  
  - Additional Analytical and Research Methods: 0.5 FCE chosen from the course list above or GGR278H5, GGR337H5, GGR308H5. |
| 3 and 4 | Normally, 5.0 FCEs each year towards the HBSc program requirements.  
  - In order to be eligible for the CDP, students must have completed a minimum of 15.0 FCEs by the end of Year 3.  
  - Students must complete all HBSc program requirements (20.0 FCEs) by the end of Year 4, in order to fulfill the conditions of the MScSM offer. | Students must complete a minimum of 4.0 FCEs in core courses:  
  - Environmental Science: ENV330H5 (0.5 FCE).  
  - Field Perspectives: 0.5 FCE chosen from ANT318H5, BIO313H5, BIO329H5, BIO416H5, ENV331H5, ERS325H5, GGR379H5, GGR390H1, or another program-relevant field course (SCI) with the program advisor's permission.  
  - Field, Project-Based, and Research Perspectives: 1.0 FCE chosen from BIO400Y5, ENV332H5, ENV399Y5, ENV497H5, ENV498Y5, GGR417Y5, JEG400Y5, JEG401Y5, SCI395H5, SCI396H5, SCI498H5, SCI499H5, or another program-relevant, project-based research course (SCI) with the program advisor's permission.  
  - Biogeochemical Perspectives: 1.5 FCEs chosen from BIO311H5, BIO312H5, BIO318Y5, BIO328H5, BIO330H5, BIO333H5, BIO373H5, BIO405H5, BIO406H5, BIO436H5, BIO464H5, CHM310H1, CHM311H5, CHM331H5, CHM333H5, CHM347H5, CHM361H5, CHM362H5, CHM391H5, CHM393H5, CHM416H5, ENV490H5, ENV491H5, ENV495H5, ENV496H5, ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR312H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR377H5, GGR384H5, GGR403H1, GGR406H5, GGR407H5, GGR409H1, GGR413H1, GGR463H5, GGR464H5, GGR479H5, GGR484H5, JGE378H5, PHY331H5.  
  - Social, Economic, and Policy Perspectives: 0.5 FCE chosen from ANT357H5, ANT368H5, ECO373Y5, ENV250Y5, ENV310H5, ENV320H5, ENV345H5, ENV351H5, ENV393H5, ENV420H5, ENV425H5, ENV452H5, GGR318H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR420H5, GGR426H5, JGE378H5, HIS318H5, HIS319H5, MGT394H5, PHL273H5, PHL373H1, POL343Y5, SOC226H5, SOC339H5, SOC356H5, WRI375H5.  
  - Students apply to the CDP and the MScSM program at the end of Year 3. Students accepted to the CDP will receive a conditional offer of admission to the MScSM program. |
| 5 and 6 | Students complete all MScSM program requirements with advanced standing of 1.0 FCE granted. | Conditions of admission to the MScSM program are removed. |
| 5 and 6 | Students complete an additional 8.0 FCEs towards the MScSM program requirements. | Exact courses will vary based on the 1.0 FCE completed in Year 4. |

- **1.0 FCE in MScSM courses**, chosen from EES1124H, EES1125H, ENV1002H, ENV1704H, ENV1707H, SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H or another program-relevant graduate course with the MScSM director's permission.

- Once accepted to the CDP, students will work with the MScSM director to choose appropriate graduate-level courses to complete during their final undergraduate year.

- **5.0 to 6.0 FCEs in core courses**: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM1090H, SSM1100Y, SSM1110H.

- **2.0 to 3.0 FCEs in elective courses**: examples include:
  - Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H.

- The internship placement (SSM1110H) will range from 2 to 4 months in length.
STG, Education and Society (Minor), Honours Bachelor of Arts / Child Study and Education, Master of Arts

STG ES (Min) HBA / CSE MA: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Arts, Minor in Education and Society / Child Study and Education, Master of Arts is designed for students interested in studying the intersections of child study, education, and human development, coupled with professional teacher preparation.

This CDP permits the completion of both degrees in six years with 1.0 full-course equivalent (FCE) that may be counted towards both the undergraduate and graduate degree. Students admitted to the CDP will follow the academic path to completion outlined below.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Minor in Education and Society, Honours Bachelor of Arts Program
Victoria College, Faculty of Arts and Science
Web: www.vic.utoronto.ca/academic-programs/upper-year-programs/education-and-society
Academic Liaison Officer
Email: vic.academics@utoronto.ca

Master of Arts in Child Study and Education Program
Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education (OISE)
Web: www.oise.utoronto.ca/jics/ma-cse-program
Email: cse.program@utoronto.ca

STG ES (Min) HBA / CSE MA: Application Process

• Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MA in Child Study and Education (MA-CSE) program, and the CDP.

STG ES (Min) HBA / CSE MA: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MA-CSE program and the CDP, students must meet the qualifications as specified by the MA-CSE program (i.e., experience working with children, submission of a Statement of Intent, and resumé/CV) and the following requirements:

• Be admitted to the HBA degree program and the Education and Society minor program.
• Meet the admission requirements of the School of Graduate Studies and MA-CSE program.
• Be enrolled full-time and in good standing in the HBA degree program.
  o Be registered in Year 3 of the HBA program.
  o Have completed or be in progress to complete VIC360H/Y Education Internship, which will take place in a setting involving young children.
  o Have an average grade equivalent to at least an A– (cumulative grade point average [CGPA] of 3.7), normally demonstrated by an average grade in Year 2.
• Provide two letters of reference: one professional, one academic.
To be given **full, unconditional admission to the MA-CSE program**, students must meet the following requirements:

- Maintain at least an A– average (3.7 CGPA) in their final year or over senior (Years 3 and 4) courses.
- Achieve a least a B+ average in the 1.0 FCE graduate course taken in Year 4.
- Successfully complete the requirements for the HBA program with the minor in Education and Society.
- Be conferred with the HBA degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

**Note**: at the undergraduate level, a credit is equal to a graduate-level full-course equivalent (FCE). Course weight is measured for both using a Y (1.0 weight) or H (0.5 weight) suffix.

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<tr>
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<th>Specific Requirements</th>
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</table>
| 1 to 3 | **Undergraduate courses in accordance with Faculty of Arts and Science regulations for the HBA degree and Education and Society minor.** | **15.0 credits toward the HBA program and degree requirements.**  
- In the Fall session, students registered in Year 3 express interest in the CDP to the Victoria College Registrar's Office, which advises applicants on the process in collaboration with the OISE Office of the Registrar and Student Services. Successful applicants receive conditional acceptance to the CDP and MA-CSE. |
| 4 | **Undergraduate courses in accordance with the U of T regulations for the Education and Society minor.**  
- **Graduate courses in accordance with the U of T regulations for the CDP.** | **4.0 credits toward the HBA program and degree requirements.**  
- **1.0 FCE in MA-CSE elective courses in consultation with the MA-CSE program chair.** This will be counted as one credit toward the overall requirements of the HBA and MA-CSE programs. This 1.0 FCE is chosen from among master's-level courses in the Department of Applied Psychology and Human Development. Elective courses that are especially recommended for Child Study and Education students are listed in the Applied Psychology and Human Development calendar entry. |
| 5 and 6 | **Remaining graduate courses in accordance with the U of T regulations for the MA-CSE program.** | **10.0 FCEs in MA-CSE program requirements.** See the Child Study and Education calendar entry for full course requirements.  
- **Note that students will have previously completed the 1.0 FCE in electives in Year 4 of the HBA program.** |
STG, Education and Society (Minor), Honours Bachelor of Science / Child Study and Education, Master of Arts

STG ES (Min) HBSc / CSE MA: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Science, Minor in Education and Society / Child Study and Education, Master of Arts is designed for students interested in studying the intersections of child study, education, and human development, coupled with professional teacher preparation.

This CDP permits the completion of both degrees in six years with 1.0 full-course equivalent (FCE) that may be counted towards both the undergraduate and graduate degree. Students admitted to the CDP will follow the academic path to completion outlined below.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Minor in Education and Society, Honours Bachelor of Science Program
Victoria College, Faculty of Arts and Science
Web: www.vic.utoronto.ca/academic-programs/upper-year-programs/education-and-society
Academic Liaison Officer
Email: vic.academics@utoronto.ca

Master of Arts in Child Study and Education Program
Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education (OISE)
Web: www.oise.utoronto.ca/jics/ma-cse-program
Email: cse.program@utoronto.ca

STG ES (Min) HBSc / CSE MA: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MA in Child Study and Education (MA-CSE) program, and the CDP.

STG ES (Min) HBSc / CSE MA: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MA-CSE program and the CDP, students must meet the qualifications as specified by the MA-CSE program (i.e., experience working with children, submission of a Statement of Intent, and resumé/CV) and the following requirements:

- Be admitted to the HBSc degree program and the Education and Society minor program.
- Meet the admission requirements of the School of Graduate Studies and MA-CSE program.
- Be enrolled full-time and in good standing in the HBSc degree program.
  - Be registered in Year 3 of the HBSc program.
  - Have completed or be in progress to complete VIC360H/Y Education Internship, which will take place in a setting involving young children.
  - Have an average grade equivalent to at least an A– (cumulative grade point average [CGPA] of 3.7), normally demonstrated by an average grade in Year 2.
- Provide two letters of reference: one professional, one academic.
To be given **full, unconditional admission to the MA-CSE program**, students must meet the following requirements:

- Maintain at least an A– average (3.7 CGPA) in their final year or over senior (Years 3 and 4) courses.
- Achieve a least a B+ average in the 1.0 FCE graduate course taken in Year 4.
- Successfully complete the requirements for the HBSc program with the minor in Education and Society.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

**Note**: at the undergraduate level, a credit is equal to graduate-level full-course equivalent (FCE). Course weight is measured for both using a Y (1.0 weight) or H (0.5 weight) suffix.

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<th>Specific Requirements</th>
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</thead>
<tbody>
<tr>
<td>1 to 3</td>
<td><strong>Undergraduate courses in accordance with Faculty of Arts and Science regulations for the HBSc degree and Education and Society minor.</strong></td>
<td><strong>15.0 credits toward the HBSc program and degree requirements.</strong>&lt;br&gt;<strong>In the Fall session, students registered in Year 3 express interest in the CDP to the Victoria College Registrar's Office, which advises applicants on the process in collaboration with the OISE Office of the Registrar and Student Services. Successful applicants receive conditional acceptance to the CDP and MA-CSE.</strong></td>
</tr>
<tr>
<td>4</td>
<td><strong>Undergraduate courses in accordance with the U of T regulations for the Education and Society minor.</strong>&lt;br&gt;<strong>Graduate courses in accordance with the U of T regulations for the CDP.</strong></td>
<td><strong>4.0 credits toward the HBSc program and degree requirements.</strong>&lt;br&gt;<strong>1.0 FCE in MA-CSE elective courses in consultation with the MA-CSE program chair. This will be counted as one credit toward the overall requirements of the HBSc and MA-CSE programs. This 1.0 FCE is chosen from among master's-level courses in the Department of Applied Psychology and Human Development. Elective courses that are especially recommended for Child Study and Education students are listed in the Applied Psychology and Human Development calendar entry.</strong></td>
</tr>
<tr>
<td>5 and 6</td>
<td><strong>Remaining graduate courses in accordance with the U of T regulations for the MA-CSE program.</strong></td>
<td><strong>10.0 FCEs in MA-CSE program requirements. See the Child Study and Education program entry for full course requirements.</strong>&lt;br&gt;<strong>Note that students will have previously completed the 1.0 FCE in electives in Year 4 of the HBSc program.</strong></td>
</tr>
</tbody>
</table>
UTSC, Evolutionary Anthropology (Major), Honours Bachelor of Science / Master of Teaching

UTSC Evo Ant (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Evolutionary Anthropology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-evolutionary-anthropology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Evo Ant (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Evo Ant (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Evolutionary Anthropology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Evolutionary Anthropology, which fulfils the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Evolutionary Anthropology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Evolutionary Anthropology (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Evo Ant (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Evolutionary Anthropology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher's Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-evolutionary-anthropology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Evo Ant (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Evo Ant (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Evolutionary Anthropology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Evolutionary Anthropology, which fulfils the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs.

Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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</table>
| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
• The undergraduate degree will include:  
  o the specialist in Evolutionary Anthropology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. | |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Exceptionality in Human Learning (Specialist), Honours Bachelor of Science / Child Study and Education, Master of Arts

UTM EHL (Spec) HBSc / CSE MA: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Exceptionality in Human Learning / Child Study and Education, Master of Arts is designed for students interested in studying human development and related areas, such as diversity and inclusion. Students may apply studies in these areas towards professional training leading to teacher certification.

This CDP permits the completion of both degrees in six years. One full graduate course (1.0 full-course equivalent [FCE]) can be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science, Specialist in Exceptionality in Human Learning / Child Study and Education, Master of Arts
www.oise.utoronto.ca/jics/ma-cse-program/combined-degree-programs

Honours Bachelor of Science Program, Specialist in Exceptionality in Human Learning
Department of Psychology, University of Toronto Mississauga
Prof. Stuart Kamenetsky, Undergraduate Director and Program Advisor
Web: www.utm.utoronto.ca/psychology/welcome-psychology-utm
Email: stuart.kamenetsky@utoronto.ca

Master of Arts Program
Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/jics/ma-cse-program
Email: cse.program@utoronto.ca

UTM EHL (Spec) HBSc / CSE MA: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the Master of Arts (MA) program, and the CDP.
- Applicants must gain independent admission to both the HBSc and MA programs before they may be considered for admission to the CDP.

UTM EHL (Spec) HBSc / CSE MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.</td>
<td>• 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.</td>
</tr>
<tr>
<td>2</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.</td>
<td>• 5.0 FCEs toward the HBSc program and degree requirements.</td>
</tr>
</tbody>
</table>
| 3    | Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program. Graduate courses in accordance with the U of T regulations for the MA program. | • 5.0 FCEs toward the HBSc program and degree requirements.  
• In the Winter session, students apply to the MA program. Upon conditional acceptance, they may apply to the CDP. |
| 4    | Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program. | • 5.0 FCEs as follows:  
• 4.0 FCEs toward the HBSc program and degree requirements.  
• 1.0 FCE in MA elective courses in the spring/summer between Year 3 and Year 4; this will be counted toward the overall requirements of the HBSc and MA degree requirements. This 1.0 FCE is chosen from among master's-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the Applied Psychology and Human Development calendar entry. Students without an undergraduate course in child development must take APD1201H Child and Adolescent Development as an elective.  
• Upon degree conferral, students apply to the MA program in order to lift conditions of admission. |
| 5 and 6 | Remaining graduate courses in accordance with the U of T regulations for the MA program. | • 10.0 FCEs in MA program requirements. See the Child Study and Education program entry for full course requirements.  
• Note that students will have previously completed the 1.0 FCE in electives in the Spring and Summer sessions of Year 3 and Year 4 of the HBSc program. |
UTM, Forensic Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTM For Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Forensic Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Forensic Biology
Forensic Science Program, University of Toronto Mississauga
Teresa Cabral, Academic Advisor
Web: www.utm.utoronto.ca/forensic
Email: teresa.cabral@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM For Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM For Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Forensic Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Forensic Biology, which fulfils the 6.0 FCEs required for Science-Biology or Science-General as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | - HBSc degree requirements.  
- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
- By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | - The undergraduate degree will include:  
  - the specialist in Forensic Biology, where the course requirements will fulfil 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.¹  
- By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
- In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | - Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Forensic Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Forensic Chemistry / Master of Teaching (MT) is designed for students interested in studying the intersections of chemistry and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Forensic Chemistry
Forensic Science Program, University of Toronto Mississauga
Teresa Cabral, Academic Advisor
Web: www.utm.utoronto.ca/forensic
Email: teresa.cabral@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM For Chm (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM For Chm (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Forensic Chemistry specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Forensic Chemistry, which fulfils the 6.0 FCEs required for Science-Chemistry as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
<th>Progression</th>
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| 1 to 4 | • HBSc degree requirements.  
        • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
        • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
                                                                                   o the specialist in Forensic Chemistry, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
                                                                                   o a minimum of 3.0 FCEs in the second teaching subject.¹  
        • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
        • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three options: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which option is selected. For details, see the MT calendar entry.
UTSC, French (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Fre (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in French / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
Centre for French & Linguistics, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/cfl
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Fre (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Fre (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Successfully complete the major in French, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<td>1 to 4</td>
<td>• HBA degree requirements. &lt;br&gt; • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. &lt;br&gt; • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.</td>
<td>• The undergraduate degree will include: &lt;br&gt; o the major in French, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and &lt;br&gt; o a minimum of 3.0 FCEs in the second teaching subject.¹ &lt;br&gt; • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science). &lt;br&gt; • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs.</td>
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<td>5 and 6</td>
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¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major Co-op in French / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
Centre for French & Linguistics, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/cfl
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Fre (Maj Co-op) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Fre (Maj Co-op) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French major co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
 • Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major co-op in French, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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 ● In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
 ● By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | ● The undergraduate degree will include:  
 o the major co-op in French, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
 o a minimum of 3.0 FCEs in the second teaching subject.  
 ● By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
 ● In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | ● Remaining courses from Year 1 and Year 2 of the MT program. | ● 11.0 FCEs during Year 1 and Year 2 of the MT program. |

^ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, French (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC Fre (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in French / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
Centre for French & Linguistics, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/cfl
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Fre (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Fre (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in French, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    • Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<thead>
<tr>
<th>Year</th>
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| 1 to 4 | • HBA degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in French, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, French (Specialist Co-op), Honours Bachelor of Arts / Master of Teaching

UTSC Fre (Spec Co-op) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist Co-op in French / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
Centre for French & Linguistics, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/cfl
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Fre (Spec Co-op) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Fre (Spec Co-op) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in French, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  • Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td>• HBA degree requirements.</td>
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<td>• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.</td>
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|        | • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | o a minimum of 3.0 FCEs in the second teaching subject.!
|        |                                                       | • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science). |
|        |                                                       | • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6| • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Major in French Studies / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program, Major in French Studies  
Department of Language Studies, University of Toronto Mississauga  
Rosa Ciantar, Undergraduate Academic Counsellor  
Web: www.utm.utoronto.ca/language-studies/department-language-studies  
Email: undergrad.langst@utoronto.ca

Master of Teaching Program  
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education  
Web: www.oise.utoronto.ca/mt  
Email: mtinfo@utoronto.ca

UTM Fre St (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTM Fre St (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French Studies major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in French Studies, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in French Studies, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCE in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Specialist in French Studies / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program, Specialist in French Studies
Department of Language Studies, University of Toronto Mississauga
Rosa Ciantar, Undergraduate Academic Counsellor
Web: www.utm.utoronto.ca/language-studies/department-language-studies
Email: undergrad.langst@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Fre St (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTM Fre St (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the French Studies specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in French Studies, which fulfills the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in French Studies, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.\(^1\)  
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

\(^1\) The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Health Administration, Master of Health Science / Master of Social Work

STG HA MHSc / MSW: Introduction

Admissions to this combined degree program (CDP) have closed. The CDP will close on August 31, 2022.

Overview

The Combined Degree Program (CDP): STG, Health Administration, Master of Health Science / Master of Social Work students can integrate their commitment to serving vulnerable individuals and populations with the knowledge and skills needed to lead in today’s challenging health and social services environment.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Master of Health Science in Health Administration Program
Institute of Health Policy, Management and Evaluation
Email: ihpme@utoronto.ca

Master of Social Work Program
Factor-Inwentash Faculty of Social Work
Email: admissions.fsw@utoronto.ca

STG HA MHSc / MSW: Application Process

- Applicants must apply to the Master of Health Science (MHSc), program, the Master of Social Work (MSW) program, and the CDP.
- Students with a Bachelor of Social Work (BSW) from a recognized university may be admitted with advanced standing. They will complete the program in 2.5 years rather than 3 years without a bachelor’s degree.
- Applicants gain independent admission to both the MHSc and MSW program before they may be considered for admission to the CDP. Note that the deadline for receipt of applications to the MHSc program is February 1 and the deadline for the MSW program is December 1.

STG HA MHSc / MSW: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the MHSc program, the School of Graduate Studies, and the MSW program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<td>1</td>
<td>MSW Year 1 program requirements.</td>
<td>Complete 4.0 full-course equivalents (FCEs) in required social work courses. Complete 0.5 FCE, the Year 1 social work extended practicum (SWK4701H).</td>
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<tr>
<td>• Students entering with a BSW are exempt from the MSW Year 1 program requirements.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 2 and 3 | • MHSc program requirements.  
• MSW Year 2 program requirements.  
• Complete 10.0 FCEs in health administration including a minimum 1.0 FCE field placement.  
• Select an MSW field of specialization and complete courses required for that field.  
• Complete 1.0 FCE, the Year 2 social work practicum (SWK4702Y).  
• In Year 2, complete a minimum of 0.5 FCE elective in each academic session from either the MHSc or MSW program. |

**Program Length**

3 years

**Time Limit**

4 years
STG, History (Major), Honours Bachelor of Arts / Master of Teaching

STG His (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Arts, Major in History / Master of Teaching (MT) is designed for students interested in studying the intersections of history and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the Faculty of Arts and Science and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE), St. George (STG) campus. They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Honours Bachelor of Arts, Major in History / Master of Teaching

www.vic.utoronto.ca/academic-programs/upper-year-programs/combined-degree-program-in-education

Honours Bachelor of Arts Program
Faculty of Arts and Science, Victoria College
Web: www.vic.utoronto.ca
Email: vic.academics@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mlinfo@utoronto.ca

STG His (Maj) HBA / MT: Application Process

- Applicants apply to the Honours Bachelor of Arts (HBA) program, then to the MT program and the CDP.
- In the Spring session of Year 3 of the HBA program, students apply for conditional admission to the MT program.

STG His (Maj) HBA / MT: Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the History major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA degree program:
  o Be registered in Year 3 of the HBA program.
  o Have an average grade equivalent to at least a B+, normally demonstrated by an average grade in Year 2.
• Have completed or be on course to complete the Education and Society minor program (Victoria College).
• Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 full-course equivalents [FCEs] in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in History, which fulfils the 6.0 FCEs required for History as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
<th>Year</th>
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<th>Specific Requirements*</th>
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| 1 to 4 | HBA degree requirements. | • The undergraduate degree will include:  
  o the minor in Education and Society;  
  o a minimum of 6.0 FCEs as part of the History major requirements, which will also qualify as prerequisite courses in the first teaching subject; and  
  • a second minor, which will also qualify as the minimum of 3.0 FCEs in the second teaching subject.1  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three options: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which option is selected. For details, see the MT calendar entry.
UTSC, History (Major), Honours Bachelor of Arts / Master of Teaching

UTSC His (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in History / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-history-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC His (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC His (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the History major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in History, which fulfils the 6.0 FCEs required for History as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in History, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, History (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC His (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in History / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-history-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC His (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC His (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the History specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in History, which fulfils the 6.0 FCEs required for History as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
• Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in History, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject. ¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Human Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-human-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Hum Bio (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Hum Bio (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Human Biology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Human Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Human Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Hum Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Human Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-human-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Hum Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Hum Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Human Biology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Human Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  o the specialist in Human Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Human Geography (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Hum Ggr (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in Human Geography / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-human-geography-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Hum Ggr (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Hum Ggr (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the Geography major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBA degree requirements.  
         • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
         • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
   o the major in Geography, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
   o a minimum of 3.0 FCEs in the second teaching subject.1  
   • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
   • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Human Geography (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC Hum Ggr (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in Human Geography / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-human-geography-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Hum Ggr (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Hum Ggr (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBA degree program and the Geography specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Geography, which fulfils the 6.0 FCEs required for Geography as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    · Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | HBA degree requirements.  
  In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | The undergraduate degree will include:  
  o the specialist in Geography, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.³  
  By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

³ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Master of Information / Master of Museum Studies

STG MI / MMSt: Introduction

Overview

The Combined Degree Program (CDP): STG, Master of Information / Master of Museum Studies is designed for students interested in museum informatics, digital cultural heritage, cultural information policy, the intersection of cultural memory institutions (libraries, archives, and museums), digital curation, and use of social networking technologies in museums. The CDP permits completion of both degrees in three years rather than the four years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Master of Information / Master of Museum Studies
ischool.utoronto.ca/areas-of-study/concurrent-registration-option

Master of Information Program
Faculty of Information
Email: admissions.ischool@utoronto.ca

Master of Museum Studies Program
Faculty of Information
Email: admissions.ischool@utoronto.ca

STG MI / MMSt: Application Process

• Applicants must apply to the Master of Information (MI) program, the Master of Museum Studies (MMSt) program, and the CDP.
• Students who have been accepted into both participating programs, with the permission of each Program Coordinator, may register concurrently in the MI and MMSt programs.
• Applicants must gain independent admission to both the MI and MMSt programs before they may be considered for admission to the CDP.

STG MI / MMSt: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the MI program, the MMSt program, and the School of Graduate Studies.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1    | Complete 5.0 full-course equivalents (FCEs) towards the MI program requirements. | • General Program Pathway:  
○ 2.0 required FCEs as follows: INF1001H, INF1003H, INF1005H, INF1006H, and INF1240H  
○ 3.0 FCEs in electives.  
• Concentration Pathway:  
○ 0.5 core FCE as follows: INF1005H and INF1006H  
○ 2.0 to 2.5 FCEs in courses required for the selected concentration  
○ 2.0 to 2.5 FCEs in electives. |
| 2 | • Complete 4.5 FCEs towards the MMSt program requirements. | • General Program Pathway:  
  o 2.0 required FCEs as follows: MSL1150H, MSL1230H, MSL2231H, and MSL2370H  
  o 0.5 FCE: MSL2350H or INF2040H  
  o MSL4000Y (1.0 FCE)  
  o 1.0 FCE in electives.  
  • Concentration Pathway:  
    o 2.0 required FCEs as follows: MSL1150H, MSL1230H, MSL2231H, and MSL2370H  
    o 0.5 FCE: MSL2350H or INF2040H  
    o MSL4000Y (1.0 FCE)  
    o 1.0 FCE in electives. |
|---|---|---|
| 3 | • Complete 3.5 FCEs towards the MI and MMSt program requirements. | • General Program Pathway:  
  o 3.5 FCEs in electives.  
  • Concentration Pathway:  
    o 3.5 FCEs in courses remaining for the concentration, and electives. |

**Program Length**

3 years

**Time Limit**

4 years
UTSC, Integrative Biology (Specialist), Honours Bachelor of Science / Master of Environmental Science

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Integrative Biology / Master of Environmental Science (MEnvSc) is designed for students interested in studying the intersections of environmental sciences with professional experiential preparation in emerging environmental challenges.

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and a Master of Environmental Science degree. Distinct advantages include:

- early application to the MEnvSc program (in Year 3) and conditional admission to the MEnvSc program;
- addressing demand from undergraduate students for further training in order to improve their level of competence as environmental practitioners; and
- the opportunity to enrol in the MEnvSc program in the Summer session between Years 4 and 5 in order to complete either a two-month academic or internship training, in addition to the mandatory four-month academic or internship opportunity completed by students in the MEnvSc program alone.

This CDP permits the completion of both degrees in five years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

UTSC, Honours Bachelor of Science, Specialist in Integrative Biology / Master of Environmental Science
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-environmental-science

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-integrative-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Environmental Science Program
University of Toronto Scarborough
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

UTSC Int Bio (Spec) HBSc / MEnvSc: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MEnvSc program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MEnvSc program; those accepted will receive a conditional offer to start the MEnvSc program upon completion of their HBSc program and degree requirements.
UTSC Int Bio (Spec) HBSc / MEnvSc: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MEnvSc program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Integrative Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MEnvSc program.
- Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Complete the following undergraduate courses (1.0 FCE) as part of the HBSc degree requirements:
  - BIOC63H3 Conservation Biology
  - BIOD54H3 Applied Conservation Biology.

To be given full, unconditional admission to the MEnvSc program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses;
- Achieve at least a grade of B– in both of the graduate courses taken in Year 4 of undergraduate study, chosen in consultation with the graduate program supervisor, as indicated below for each MEnvSc field.
  - Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling plus an additional 0.5 FCE.
  - Conservation and Biodiversity field: EES3002H Conservation Policy plus an additional 0.5 FCE.
  - Terrestrial and Aquatic Systems field: 1.0 FCE.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 3 | - HBSc degree requirements. | - The undergraduate degree will include the specialist in Integrative Biology.  
- By the end of Year 3, students will select one of the three fields of study within the MEnvSc program at the time of application:  
  - Climate Change Impacts and Adaptation;  
  - Conservation and Biodiversity; or  
  - Terrestrial and Aquatic Systems. |
| 4 | - By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements, including specific undergraduate courses for the CDP.  
- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. | - Students who receive a conditional offer of admission to the CDP must complete the following undergraduate courses:  
  - BIOC63H3 Conservation Biology (0.5 FCE) and  
  - BIOD54H3 Applied Conservation Biology (0.5 FCE).  
- Students must complete 1.0 FCE in graduate courses, chosen in consultation with the graduate program supervisor, as follows:  
  - Climate Change Impacts and Adaptation field: EES1133H Climate Change Science and Modelling (0.5 FCE) plus an elective (0.5 FCE);  
  - Conservation and Biodiversity field: EES3002H Conservation Policy (0.5 FCE) plus an elective (0.5 FCE);  
  - Terrestrial and Aquatic Systems field: 1.0 FCE. |
| Optional registration in the Summer session prior to Year 5 | Optional two-month academic or internship training. | EES4001H Internship Training 1 (0.5 FCE) or EES4003H Academic Training 1 (0.5 FCE). |
|   | Remaining courses from Year 1 and Year 2 of the MEnvSc program. | Students registered in the optional Summer academic or internship training must complete 4.0 FCEs as follows:  
|   |   | o coursework (2.0 FCEs) and internship (2.0 FCEs) or coursework (2.5 FCEs) and research paper (1.5 FCEs). |
|   | Students not registered in the optional Summer academic or internship training must complete 4.5 FCEs as follows:  
|   |   | o internship option: coursework (2.5 FCEs) and internship (2.0 FCEs) or research option: coursework (3.0 FCEs) and research paper (1.5 FCEs). |
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Integrative Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-integrative-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Int Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Int Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Integrative Biology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Integrative Biology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Year</th>
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<th>Specific Requirements*</th>
</tr>
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</table>
| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Integrative Biology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

² The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Kinesiology, Bachelor of Kinesiology / Master of Teaching

STG Kin BKin / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Bachelor of Kinesiology / Master of Teaching (MT) is designed for students interested in studying the intersections of kinesiology and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a Bachelor of Kinesiology (BKin) degree from the Faculty of Kinesiology and Physical Education and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Kinesiology, Bachelor of Kinesiology / Master of Teaching
kpe.utoronto.ca/academics-research/bachelor-kinesiology-bkin/combined-master-teaching-degree-program

Bachelor of Kinesiology Program
Faculty of Kinesiology and Physical Education
Web: kpe.utoronto.ca/academics-research/bachelor-kinesiology-bkin
Email: undergrad.kpe@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Kin BKin / MT: Application Process

- Applicants apply to the BKin program, the MT program, and the CDP.
- Applicants may apply to the CDP in Year 3 of the BKin program for an early conditional admission to the MT program.

STG Kin BKin / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the BKin program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the BKin program:
  o Have a cumulative grade point average (CGPA) of between 3.15 and 3.49 or higher, normally demonstrated by an average grade in Year 2 of the BKin program.
  o Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 full-course equivalents [FCEs] in the first teaching subject and a minimum of 1.0 FCE (or 2.0 FCEs where applicable) in the second teaching subject by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a CGPA of between 3.15 and 3.49 or higher in their final year of study in the BKin program.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete 6.0 FCEs in the first teaching subject (i.e., health and physical education).
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their BKin academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the BKin degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | - BKin degree requirements.  
  - In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  - By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | - The undergraduate degree will include:  
  o a minimum of 6.0 FCEs in the first teaching subject (i.e., health and physical education);  
  o a minimum of 3.0 FCEs in the second teaching subject.  
  - By the end of Year 3, complete 3.0 FCEs in the first teaching subject and 1.0 FCE in the second teaching subject.  
  - In Year 4, students who receive a conditional offer of admission to the CDP complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the BKin and MT degree programs. |
| 5 and 6 | - Remaining courses from Year 1 and Year 2 of the MT program. | - 11.0 FCEs during Year 1 and Year 2 of the MT program. |

Note that the teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

*The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Doctor of Philosophy

STG JD / Cri PhD: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Doctor of Philosophy is designed for students interested in studying the intersections of law and criminology and sociolegal studies. The CDP permits the completion of both degrees in six years rather than the seven years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Criminology and Sociolegal Studies, Doctor of Philosophy
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdphd-criminology-and-sociolegal-studies
www.crimsl.utoronto.ca/graduate/prospective-graduate-students/collaborative-and-combined-programs

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Doctor of Philosophy Program in Criminology and Sociolegal Studies
Centre for Criminology and Sociolegal Studies
Email: audrey.macklin@utoronto.ca

STG JD / Cri PhD: Application Process

• Applicants must apply to the Juris Doctor (JD) program, the Criminology and Sociolegal Studies (Criminology and Sociolegal Studies) PhD program, and the CDP.
• Applicants are considered for the CDP after they have secured independent admission to the JD and PhD programs.
• Applicants admitted to both the JD and PhD must inform both programs of their status and request admission to the CDP.
• Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Cri PhD: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the PhD program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2</td>
<td>• PhD program requirements.</td>
<td>• Complete 2.0 full-course equivalents (FCEs) in Criminology and Sociolegal Studies.</td>
</tr>
<tr>
<td>3 and 4</td>
<td>• JD program requirements.  &lt;br&gt; • PhD program requirements.</td>
<td>• Complete 45 JD credits.  &lt;br&gt; • Complete the PhD comprehensive exam and dissertation proposal.  &lt;br&gt; • Achieve candidacy by the end of Year 4.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>• PhD program requirements.</td>
<td>• Complete any remaining PhD program requirements and a PhD thesis.</td>
</tr>
</tbody>
</table>
STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Master of Arts

STG JD / Cri MA: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Master of Arts is designed for students who wish to pursue this interdisciplinary approach to the study of criminal justice and social regulation. The CDP permits the completion of both degrees in three years rather than the four years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Criminology and Sociolegal Studies, Master of Arts
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdma-criminology
www.crimsl.utoronto.ca/graduate/prospective-graduate-students/collaborative-and-combined-programs

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Arts in Criminology and Sociolegal Studies Program
Centre for Criminology and Sociolegal Studies
Email: audrey.macklin@utoronto.ca

STG JD / Cri MA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the Criminology and Sociolegal Studies MA program, and the CDP.
- Applicants are considered for the CDP after they have secured independent admission to the JD and MA programs.
- Applicants admitted to both the JD and MA must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Cri MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Year 1 JD program requirements.</td>
<td>Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2 and 3</td>
<td>JD program requirements.</td>
<td>Complete 45 JD credits including a moot, an extended paper, a perspective course, and an international/comparative/transnational (ICT) course. Complete 3.0 full-course equivalents (FCEs) toward the MA program requirements including CRI2010H (0.5 FCE) and a course in theory or research methods. Students may choose to complete the continuous course CRI3360Y Research Paper (1.0 FCE). Complete a minimum of 1.0 FCE with a CRI designation in each of Years 2 and 3, and a maximum of 2.0 FCEs in CRI courses per year. The number of JD credits completed each year will be adjusted accordingly, with the only requirement being that 45 credits are completed over the two years.</td>
</tr>
<tr>
<td></td>
<td>MA program requirements.</td>
<td></td>
</tr>
</tbody>
</table>

**Program Length**

3 years

**Time Limit**

4 years
The Combined Degree Program (CDP): STG, Law, Juris Doctor / Economics, Doctor of Philosophy allows a student to complete all the requirements for the Juris Doctor (JD) program and all the requirements for the PhD program (except a dissertation) in four years rather than the five years it would take to acquire them independently. In Years 5 and 6, students will complete a dissertation.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Economics, Doctor of Philosophy
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdphd-economics
www.economics.utoronto.ca/index.php/index/graduate/jdphd

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Doctor of Philosophy in Economics Program
Department of Economics
Email: www.economics.utoronto.ca/index.php/index/index/contact

STG JD / Eco PhD: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the Economics PhD program, and the CDP.
- Applicants are considered for the CDP after they have secured independent admission to the JD and PhD programs.
- Applicants admitted to both the JD and PhD must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Eco PhD: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the PhD program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2</td>
<td>• PhD program requirements.</td>
<td>• Students normally complete ECO2010H <em>Mathematics and Statistics for PhD Students</em> (0.5 full-course equivalent [FCE]; Credit/No Credit) plus 3.0 FCEs as follows: ECO2200H and ECO2201H, macroeconomics (ECO2100H and ECO2101H), and econometrics (ECO2400H and ECO2401H). • Complete theory comprehensive exams.</td>
</tr>
<tr>
<td>3</td>
<td>• PhD and JD program requirements.</td>
<td>• Complete an additional 3.0 FCEs in economics courses including the required courses for a major field and minor field of specialization. • May be required to complete a field comprehensive exam in the major field of specialization. • Complete 0.5 FCE in law and economics. • Participate in the full-year continuous course ECO4060Y <em>Graduate Research Seminar</em> (Credit/No Credit). • Complete the Year 2 economics paper. • Complete 14 to 16 JD credit hours.</td>
</tr>
<tr>
<td>4</td>
<td>• JD program requirements.</td>
<td>• Complete 28 to 32 JD credit hours including the extended paper requirement in law.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>• PhD program requirements.</td>
<td>• Complete a PhD dissertation. • It is expected, but not required, that a student's dissertation committee will include a member of the Faculty of Law.</td>
</tr>
</tbody>
</table>

**Program Length**

6 years

**Time Limit**

8 years
STG, Law, Juris Doctor / Economics, Master of Arts

STG JD / Eco MA: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Economics, Master of Arts is designed for students who intend to pursue careers in areas that require some sophistication in economics, such as competition policy, commercial contracting, mergers and acquisitions, business organization, tax policy, environmental law, and international trade regulation.

The CDP permits the completion of both the Juris Doctor (JD) program and the eight-month MA program in three years rather than the four years it would take to acquire the degrees independently. (Note that this program cannot be combined with any of the collaborative specializations.)

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Economics, Master of Arts
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdma-economics
www.economics.utoronto.ca/index.php/index/graduate/jdma

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Arts in Economics Program
Department of Economics
Email: www.economics.utoronto.ca/index.php/index/index/contact

STG JD / Eco MA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the Economics MA program, and the CDP.
- Applicants are considered for the CDP after they have secured independent admission to the JD and MA programs.
- Applicants admitted to both the JD and MA must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Eco MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Year 1 JD program requirements.</td>
<td>Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2, 3, and 4</td>
<td>JD program requirements.  MA program requirements.</td>
<td>Complete 45 JD credits including a perspective course, a moot (compulsory or competitive), and an international/comparative/transnational (ICT) perspective course.  Complete ECO1010H <em>Mathematics and Statistics for MA and MFE Students</em> (0.5 full-course equivalent [FCE]) plus 3.0 FCEs toward the MA program requirements including ECO1100H, ECO1200H, ECO1400H, and ECO1950H.  In Year 2, complete a minimum of 2.5 FCEs in economics, including ECO1010H (note that this course starts in mid-August, three weeks earlier than other Fall courses in Economics).</td>
</tr>
</tbody>
</table>

**Program Length**

3 years

**Time Limit**

4 years
STG, Law, Juris Doctor / English, Master of Arts

STG JD / Eng MA: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / English, Master of Arts is designed for students interested in studying the intersections of law and literature. The CDP permits the completion of both degrees in three years rather than the four years it would take to acquire them independently.

Applicants must apply to each program separately; they should indicate on their applications that they wish to be considered for the CDP. The MA program in English must be completed by coursework, not by thesis.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / English, Master of Arts
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdma-english
www.english.utoronto.ca/grad/programs/jdma.htm

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Arts Program
Department of English
Email: deptofenglish.graduate@utoronto.ca

STG JD / Eng MA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the English MA program, and the CDP.
- Applicants are considered for the CDP after they have secured independent admission to the JD and MA programs.
- Applicants admitted to the JD and MA must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Eng MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- Year 1 JD program requirements.</td>
<td>- Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2 and 3</td>
<td>- JD program requirements. - MA program requirements.</td>
<td>- Complete 44 JD credits including a moot, an extended paper, a perspective course, and an international/comparative/transnational (ICT) course. Students graduating in 2017 or later must complete 45 JD credits. - 3.0 full-course equivalents (FCEs) toward the MA program requirements (1.5 FCE in each of Years 2 and 3) including ENG6999Y, and at least 1.0 FCE in law and literature program courses. - Complete a JD Directed Research project (at least 3 JD credits) or an MA English reading course (0.5 FCE) on a topic related to law and literature.</td>
</tr>
</tbody>
</table>

**Program Length**

3 years

**Time Limit**

4 years
STG, Law, Juris Doctor / European and Russian Affairs, Master of Arts

STG JD / ERA MA: Introduction

Overview

Legal issues are at the forefront of the changes currently transforming Russia and Eastern Europe. The Combined Degree Program (CDP): STG, Law, Juris Doctor / European and Russian Affairs, Master of Arts enables students to combine their law degree with intensive study of this region. The CDP permits the completion of both degrees in four years rather than the five years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / European and Russian Affairs, Master of Arts
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdma-russian
munkschool.utoronto.ca/ceres/graduate-students

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Arts in European and Russian Affairs Program
Centre for European, Russian, and Eurasian Studies
Email: katia.malyuzhinets@utoronto.ca

STG JD / ERA MA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the European and Russian Affairs MA program, and the CDP.
- Applicants are considered for the CDP after they have secured independent admission to the JD and MA programs.
- Applicants admitted to both the JD and MA must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / ERA MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2</td>
<td>• MA program requirements.</td>
<td>• Complete a minimum of 2.0 FCEs toward the MA program.</td>
</tr>
<tr>
<td>2, 3, and 4</td>
<td>• JD program requirements. • MA program requirements. • Additional MA or JD program requirements chosen by the student.</td>
<td>• Complete 45 JD credits including a perspective course, a moot (compulsory or competitive), and an international/comparative/transnational (ICT) perspective course. • Complete 5.0 FCEs toward the MA program requirements including ERE2000Y and ERE2001Y. • Before starting Year 4, demonstrate reading competence in one of the region's languages pertinent to the research undertaken for the major research paper in ERE2000Y. • Students choose to complete an additional: o 1.0 FCE MA courses or o 6 JD credits or o 0.5 FCE MA course and 3 JD credits.</td>
</tr>
</tbody>
</table>

**Program Length**

4 years

**Time Limit**

5 years
STG, Law, Juris Doctor / Management, Master of Business Administration

STG JD / MBA: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Management, Master of Business Administration is a four-year program offered by the Faculty of Law and the Rotman School of Management for students who wish to combine graduate training in management with a degree in law.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Management, Master of Business Administration Program
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdmba-program
www.rotman.utoronto.ca/Degrees/MastersPrograms/JointDegrees/JDMBA

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Business Administration Program
Rotman School of Management
Email: mba@rotman.utoronto.ca

STG JD / MBA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the Master of Business Administration (MBA) program, and the CDP.
- Applicants must gain independent admission to both the JD and MBA programs before they may be considered for admission to the CDP. Alternatively, students in Year 1 of either the JD or Full-Time MBA program can apply to the CDP.
- Applicants must obtain satisfactory scores on the Law School Admission Test (LSAT). The Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE; General Test) are recommended but not required. Test results are valid for five years.

STG JD / MBA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MBA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2</td>
<td>• Year 1 MBA program requirements.</td>
<td>• Complete 5.63 FCEs in required Year 1 courses of the MBA program, including 1.5 elective FCEs at the 2000 level.</td>
</tr>
</tbody>
</table>
| 3 and 4 | • 2000-level MBA courses.  
• JD program requirements.  
• Complete the remaining MBA 1000-level required courses. | • Complete 3.67 FCEs as follows:  
  o 3.5 FCEs in 2000-level MBA courses.  
  o RSM1160H *Business Ethics* (0.17 FCE).  
• Specific restrictions apply for students who wish to take MBA experiential learning courses. Please refer to the MBA program requirements for more information.  
• Complete 45 JD credits including a perspective course, a moot, and an international/comparative/transnational (ICT) perspective course. At least 10 credits must be management related.  
• Students should not take any courses outside the Faculty of Law or Rotman School except on an approved exchange program and with permission of both Faculties. |

**Program Length**

4 years

**Time Limit**

5 years
STG, Law, Juris Doctor / Master of Global Affairs

STG JD / MGA: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Master of Global Affairs is designed for students interested in studying the intersections of law and global affairs. The CDP permits the completion of both degrees in four years rather than the five years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Master of Global Affairs
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdmga-master-global-affairs
munkschool.utoronto.ca/mga/joint-degrees/juris-doctor-master-of-global-affairs

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Global Affairs Program
Munk School of Global Affairs and Public Policy
Email: mga@utoronto.ca

STG JD / MGA: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the Master of Global Affairs (MGA) program, and the CDP.
- Applicants may be considered for the CDP after they have gained independent admission to the JD and MGA programs.
- Applicants admitted to both the JD and MGA must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / MGA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MGA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
</tbody>
</table>
| 2    | • 4.5 full-course equivalents (FCEs) in Year 1 MGA program requirements.  
• Required law course.  
• At the end of Year 1, declare an emphasis as part of the degree program. | • **3.0 required FCEs** in Year 1 MGA courses as follows:  
  o GLA1001H *Macroeconomics: Markets, Institutions, and Growth*;  
  o GLA1003H *Global Security*;  
  o GLA1010H *Microeconomics for Global Affairs*;  
  o GLA1011H *Global Innovation Policy*;  
  o GLA1012H *Statistics for Global Affairs*; and  
  o GLA1014H *Global Development*.  
  o 0.5 FCE: LAW252H1, which will count towards the MGA program requirements. This course is graded on the graduate scale.  

• **1.0 elective FCE** from the following Year 1 MGA courses:  
  o 0.5 FCE from GLA2027H *Ethics and Global Affairs*, GLA2029H *Sustainability in the World: A Living Lab Course*, or GLA2034H *Decision Making and Strategic Thinking*;  
  o 0.5 FCE from the MGA elective course list.  

• **0.5 required FCE**: complete GLA1007H *Global Internship* in the Summer session between Years 2 and 3. |
| 3 and 4 | • 3.5 FCEs in MGA program requirements.  
• JD credits. | • **2.5 FCEs** in 2000-level elective MGA courses. Of these, 1.5 FCEs are taken in the chosen emphasis.  
• **1.0 FCE** in required Year 2 courses: GLA2000H *Capstone Seminar* and GLA2111H *Research Methods for Global Affairs*.  
• Complete 41 to 45 JD credits including all upper-year course requirements. At least 6 credits must be in the area of international law. |

**Program Length**

4 years

**Time Limit**

5 years
STG, Law, Juris Doctor / Master of Information

STG JD / MI: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Master of Information is designed for students who wish to combine graduate training in information studies with a degree in law. The CDP permits completion of both degrees in four years rather than the five years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Master of Information
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdmi-information

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Information Program
Faculty of Information
Email: admissions.ischool@utoronto.ca

STG JD / MI: Application Process

• Applicants must gain independent admission to both the Juris Doctor (JD) and Master of Information (MI) programs before they may be considered for admission to the CDP.
• Applicants admitted to both the JD and MI must inform both programs of their status and request admission to the CDP.
• Applicants may also be considered for the CDP while they are in Year 1 of either the JD or the MI program. Interested students should contact their home Faculty about this before applying to the CDP.

STG JD / MI: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MI program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• JD program requirements.</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law</td>
</tr>
<tr>
<td>2</td>
<td>• MI program requirements.</td>
<td>• Complete 4.0 full-course equivalents (FCEs) in the MI program, and enrol in either the General Program Pathway or one or more concentration areas. See more information on required courses in the General Program Pathway or the concentration(s) of choice.</td>
</tr>
</tbody>
</table>
| 3 and 4 | • JD program requirements.  
• MI program requirements. | • Complete 45 JD credits including a moot, an extended paper, a perspective course, and an international/comparative/transnational (ICT) course.  
• Complete the remaining 4.0 FCEs in the MI program. |
STG, Law, Juris Doctor / Master of Public Policy

STG JD / MPP: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Master of Public Policy program is designed for students interested in studying the intersections of law and public policy. The CDP permits completion of both degrees in four years rather than the five years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Master of Public Policy
www.law.utoronto.ca/academic-programs/jd/combined-programs/jdmpp-public-policy
munkschool.utoronto.ca/publicpolicy/programs/master-of-public-policy-program/mpp-jd-joint-program

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Public Policy Program
Munk School of Global Affairs and Public Policy
Email: public.policy@utoronto.ca

STG JD / MPP: Application Process

• Applicants must apply to the Juris Doctor (JD) program, the Master of Public Policy (MPP) program, and the CDP.
• Applicants are considered for the CDP after they have secured independent admission to the JD and MPP programs.
• Applicants admitted to the JD and MPP must inform both programs of their status and request admission to the CDP.
• Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / MPP: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MPP program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Year 1 JD program requirements</td>
<td>• Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
</tbody>
</table>
| 2    | • Year 1 MPP program requirements, with the exception of PPG1008H. | • Complete 3.0 full-course equivalents (FCEs) in the MPP program:  
  o PPG1000H Governance, Institutions, and Public Policy;  
  o PPG1002H Microeconomics for Policy Analysis;  
  o PPG1003H Macroeconomics for Policy Analysis;  
  o PPG1004H Quantitative Methods for Policy Analysis;  
  o PPG1005H The Social Context of Policy-Making; and  
  o PPG1007H Strategic Policy Implementation.  
  • Substitute PPG1008H with an equivalent Law course (0.5 FCE) and obtain a minimum B+.  
  • In the Summer session of Year 2, complete PPG2006Y MPP Internship. |
| 3 and 4 | • MPP and JD program requirements. | • Complete 2.5 FCEs in the MPP program:  
  o PPG2000H Politics and the Policy Process;  
  o PPG2002H Topics in Applied Economics for Public Policy;  
  o PPG2003H Capstone Course: Integrating Issues in Public Policy;  
  o either PPG2011H Ethics and the Public Interest or PPG2022H Moral Foundations of Public Policy; and  
  o either GLA2029H Sustainability in the World: A Living Lab Course or GLA2034H Decision Making and Strategic Thinking.  
  • In Year 3, complete a minimum of 2.0 elective FCEs in the MPP program.  
  • In Years 3 and 4, complete a total of 41 to 45 JD credits, of which at least 18 credits are completed in Year 3. These include a perspective course, a moot (compulsory or competitive), and a Supervised Upper-Year Research Paper (SUYP). Students graduating in 2017 or later will earn 45 JD credits. |
STG, Law, Juris Doctor / Master of Social Work

STG JD / MSW: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Master of Social Work combines the Faculty of Law’s interdisciplinary teaching environment with its commitment to public interest law. The program is designed for students who wish to practise in the areas in which law and social work interact (for example, child welfare, mental health, social policy, human rights).

The CDP permits completion of both the Juris Doctor (JD) and Master of Social Work (MSW) degrees in four years rather than the five years it would take to acquire them independently.

Students who enter with a Bachelor of Social Work (BSW) will be given advanced standing and are exempted from completing Year 1 of the MSW. Therefore, they will complete Years 1, 3, and 4 of the CDP only, completing the CDP in three years.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Master of Social Work
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdmsw-social-work
socialwork.utoronto.ca/programs/msw/msw-combined-programs/

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Master of Social Work Program
Factor-Inwentash Faculty of Social Work
Email: michael.saini@utoronto.ca

STG JD / MSW: Application Process

• Applicants must apply to the Juris Doctor (JD) program, the Master of Social Work (MSW) program, and the CDP.
• Applicants must gain independent admission to both the JD and MSW programs before they may be considered for admission to the CDP.
• Applicants admitted to the JD and MSW must inform both programs of their status and request admission to the CDP.
• Applicants may also be considered for the CDP while they are in Year 1 of the JD or MSW program. Interested students should contact the Faculty of Law or Faculty of Social Work about this before applying to the CDP.

STG JD / MSW: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the MSW program.
• Students with a BSW from a recognized university may be admitted with advanced standing.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td><strong>Complete all Year 1 courses of the JD program at the Faculty of Law.</strong></td>
</tr>
</tbody>
</table>
| 2    | **Year 1 MSW program requirements.**  
Alternatively, students who enter with a BSW (i.e., advanced standing) are exempt from Year 1 MSW requirements and may progress to the requirements of Years 3 and 4. | **Complete 4.0 full-course equivalents (FCEs) from the following Year 1 MSW courses: SWK4102H, SWK4103H, SWK4105H, SWK4107H, SWK4510H, SWK4602H, SWK4605H, SWK4654H, and SWK4658H.**  
**Complete the MSW Year 1 practicum (SWK4701H).** |
| 3 and 4 | **Complete JD credits and MSW program requirements.** | **Complete 32 JD credits including a moot, a perspective course, and an international/comparative/transnational (ICT) perspective course.**  
**Complete all course requirements for one of the MSW fields chosen from:**  
o Children and Their Families  
o Social Justice and Diversity  
o Health and Mental Health  
o Social Service Administration  
o Gerontology.  
**Complete the Year 2 MSW practicum (SWK4702Y) in Year 3 of the CDP. Advanced-standing students complete the Year 2 MSW practicum in Year 2 of the CDP.**  
**Complete 6 JD credits or 1.0 FCE in integrated courses:**  
o LAW345Y1 (3 JD credits) plus a directed reading project (3 JD credits) or a directed reading course (3 JD credits) or integrated law and social work courses (1.0 FCE). |

**Program Length**

4 years

**Time Limit**

5 years
The Combined Degree Program (CDP): STG, Law, Juris Doctor / Philosophy, Doctor of Philosophy enables students to pursue a deep investigation of the complex issues that lie at the intersection between law and philosophy. The CDP permits completion of both the Juris Doctor (JD) and PhD degrees one year sooner than it would take to acquire them independently. At the end of that period, the student will have completed the JD degree and reached the dissertation stage of the PhD in Philosophy.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Philosophy, Doctor of Philosophy
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdphd-philosophy

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Doctor of Philosophy in Philosophy
Department of Philosophy
Email: m.opoku.pare@utoronto.ca

STG JD / Phl PhD: Application Process

- Applicants must apply to the JD program, the PhD (Philosophy) program, and the CDP.
- Applicants may be considered for the CDP after they have gained independent admission to both the JD and PhD programs.
- Only after admission has been secured from both departments will the coordinator advise the applicant of admission into the program.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Phl PhD: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the PhD program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
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<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Year 1 JD program requirements.</td>
<td>Complete all Year 1 courses of the JD program at the Faculty of Law.</td>
</tr>
<tr>
<td>2 and 3</td>
<td>JD program requirements.</td>
<td>Complete 48 JD credits including a moot, a perspective course, and an international/comparative/transnational (ICT) perspective course.</td>
</tr>
<tr>
<td></td>
<td>PhD program requirements.</td>
<td>2.0 full-course equivalents (FCEs) in Philosophy courses, which will count as 8 JD credits toward the total JD credits required.</td>
</tr>
<tr>
<td>4</td>
<td>PhD program requirements.</td>
<td>Complete any remaining courses in the PhD program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complete area and language exams required for the PhD program.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>PhD program requirements.</td>
<td>Complete any remaining PhD program requirements and a PhD thesis.</td>
</tr>
</tbody>
</table>
STG, Law, Juris Doctor / Political Science, Doctor of Philosophy

STG JD / Pol PhD: Introduction

Overview

The Combined Degree Program (CDP): STG, Law, Juris Doctor / Political Science, Doctor of Philosophy is designed for students interested in studying the intersection of law and political science. The CDP permits completion of both the Juris Doctor (JD) and PhD degrees at least one year sooner than it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Law, Juris Doctor / Political Science, Doctor of Philosophy
www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdphd-political-science

Juris Doctor Program
Faculty of Law
Email: law.admissions@utoronto.ca

Doctor of Philosophy Program in Political Science
Department of Political Science
Email: poligrad@utoronto.ca

STG JD / Pol PhD: Application Process

- Applicants must apply to the Juris Doctor (JD) program, the PhD (Political Science) program, and the CDP.
- Applicants may be considered for admission to the CDP after they have gained independent admission to both the JD and PhD programs.
- Applicants admitted to the JD and PhD must inform both programs of their status and request admission to the CDP.
- Applicants may also be considered for the CDP while they are in Year 1 of the JD program. Interested students should contact the Faculty of Law about this before applying to the CDP.

STG JD / Pol PhD: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the JD program, the School of Graduate Studies, and the PhD program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
### Year 1
- Year 1 JD program requirements.
- Complete all Year 1 courses of the JD program at the Faculty of Law.

### Year 2
- PhD program requirements.
- Students complete coursework and exams required for the PhD program.
- Specific requirements will vary based on the student’s choice of fields and whether a PhD student is admitted via direct entry.

### Year 3 and 4
- JD program requirements.
- Complete 48 JD credits including the Directed Research Program.
- Any language requirements for the PhD must be completed by the end of Year 4.

### Year 5 and 6
- PhD program requirements.
- Complete any remaining PhD program requirements and also a PhD thesis.
STG, Management, Master of Business Administration / Master of Global Affairs

STG MBA / MGA: Introduction

Overview

The Combined Degree Program (CDP): STG, Management, Master of Business Administration / Master of Global Affairs is designed for students interested in studying the intersections of business and global affairs. The CDP permits the completion of both degrees in three years rather than the four years it would take to acquire them independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Management, Master of Business Administration / Master of Global Affairs Program
Web: munkschool.utoronto.ca/mga/joint-degrees/master-of-global-affairs-mba

Master of Business Administration Program
Rotman School of Management
Email: ro@rotman.utoronto.ca

Master of Global Affairs Program
Munk School of Global Affairs and Public Policy
Email: mga@utoronto.ca

STG MBA / MGA: Application Process

• Applicants must apply to the Master of Business Administration (MBA) program, the Master of Global Affairs (MGA) program, and the CDP.
• Applicants must gain independent admission to both the MBA and MGA programs before they may be considered for admission to the CDP. Alternatively, applicants may apply to the MBA program and CDP in Year 1 of the MGA program.

STG MBA / MGA: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the School of Graduate Studies, the MBA program, and the MGA program.
• Applicants to the MBA program must meet the following admission requirements:
  • An appropriate bachelor's degree from a recognized university.
  • A satisfactory score on the Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE; General Test). Test results are valid for five years.
  • The minimum two-year work experience requirement will be waived for CDP applicants.
  • The Full-Time MBA program starts annually in August. Applicants to the full-time program are encouraged to apply as per the deadline dates (beginning in October with a final deadline in May).
• Applicants to the MGA program must meet the following admission requirements:
  • An appropriate bachelor's degree with a minimum standing in the final year equivalent to at least a University of Toronto B+.
  • The program is open to all disciplinary backgrounds.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
<table>
<thead>
<tr>
<th>Year</th>
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<th>Specific Requirements</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>3.5 required FCEs:</strong></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>o GLA1001H <em>Macroeconomics: Markets, Institutions, and Growth</em>;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o GLA1003H <em>Global Security</em>;</td>
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<td></td>
<td>o GLA1006H <em>International Legal Challenges</em>;</td>
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<td>o GLA1010H <em>Microeconomics for Global Affairs</em>;</td>
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<td>o GLA1011H <em>Global Innovation Policy</em>;</td>
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<td>o GLA1012H <em>Statistics for Global Affairs</em>;</td>
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<tr>
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<td></td>
<td>o GLA1014H <em>Global Development</em>.</td>
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<tr>
<td></td>
<td></td>
<td><strong>1.0 elective FCE</strong> from the following Year MGA courses:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o 0.5 FCE from GLA2027H <em>Ethics and Global Affairs</em>, GLA2029H <em>Sustainability in the World: A Living Lab Course</em>, or GLA2034H <em>Decision Making and Strategic Thinking</em>;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o 0.5 FCE from the MGA elective course list.</td>
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<tr>
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<td></td>
<td><strong>0.5 FCE:</strong> GLA1007H <em>Global Internship</em>, to be taken in the Summer session.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>4.13 required FCEs in MBA courses:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o RSM1165H <em>Leveraging Diverse Teams</em> (Credit/No Credit);</td>
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<tr>
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<td></td>
<td>o RSM1201H <em>Foundations of Strategic Management</em>;</td>
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<td>o RSM1210H <em>Managerial Economics</em>;</td>
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<td>o RSM1211H <em>Economic Environment of Business</em>;</td>
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<td>o RSM1215H <em>Decision Making with Models and Data</em>;</td>
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<td>o RSM1220H <em>Financial Accounting and Reporting: A Global Perspective</em>;</td>
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<td></td>
<td>o RSM1222H <em>Managerial Accounting</em>;</td>
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<td>o RSM1231H <em>Finance I: Global Markets and Valuation</em>;</td>
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<td>o RSM1232H <em>Finance II: Corporate Finance</em>;</td>
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<td>o RSM1240H <em>Operations Management</em>;</td>
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<td>o RSM1250H <em>Managing Customer Value</em>;</td>
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<td></td>
<td>o RSM1260H <em>Leading People in Organizations</em>; and</td>
</tr>
<tr>
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<td></td>
<td>o RSM1282H <em>Statistics for Management</em>.</td>
</tr>
<tr>
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<td></td>
<td><strong>1.5 elective FCEs</strong> from the 2000-level MBA course list.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Specific restrictions apply for students who wish to take MBA experiential learning courses. Please refer to the MBA program requirements for more information.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>3.17 FCEs in MBA program requirements.</strong></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td><strong>0.17 required FCE</strong> in MBA courses: RSM1160H <em>Business Ethics</em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>3.0 elective FCEs</strong> from the 2000-level MBA course list.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>2.5 elective FCEs</strong> in MGA courses. Of these, 1.5 FCEs are taken in the chosen emphasis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>1.0 required FCE:</strong> GLA2000H <em>Capstone Seminar</em> and GLA2111H <em>Research Methods for Global Affairs</em>.</td>
</tr>
</tbody>
</table>

To participate in the Rotman Student Exchange Program, students must get permission from both programs. Students in the CDP can only participate in the Rotman Exchange program and not the MGA Exchange Program. No MGA course requirements can be met while on exchange. While on exchange, students must take the equivalent of five elective courses (2.5 FCEs) to meet their MBA elective requirements.

**Program Length**

3 years

**Time Limit**

4 years
Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Major in Language Teaching and Learning: French / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program, Major in Language Teaching and Learning: French
Department of Language Studies, University of Toronto Mississauga
Rosa Ciantar, Undergraduate Academic Counsellor
Web: www.utm.utoronto.ca/language-studies/department-language-studies
Email: undergrad.langst@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Lang Teach Learn Fre (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTM Lang Teach Learn Fre (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Language Teaching and Learning: French major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBA program.
To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Language Teaching and Learning: French, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
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| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  - the major in Language Teaching and Learning: French, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.1  
  - By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
  - In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Language Teaching and Learning: French and Italian (Specialist), Honours Bachelor of Arts / Master of Teaching

UTM Lang Teach Learn Fre Ita (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Arts, Specialist in Language Teaching and Learning: French and Italian / Master of Teaching (MT) is designed for students interested in studying the intersections of French and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program, Specialist in Language Teaching and Learning: French and Italian
Department of Language Studies, University of Toronto Mississauga
Rosa Ciantar, Undergraduate Academic Counsellor
Web: www.utm.utoronto.ca/language-studies/department-language-studies
Email: undergrad.langst@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Lang Teach Learn Fre Ita (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTM Lang Teach Learn Fre Ita (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Language Teaching and Learning: French and Italian specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBA program:
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2:
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicate their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Language Teaching and Learning: French and Italian, which fulfils the 6.0 FCEs required for French (Second Language) as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBA degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. |  
  • The undergraduate degree will include:  
    - the specialist in Language Teaching and Learning: French and Italian, where the course requirements will fulfils the 6.0 FCEs required for the first teaching subject; and  
    - a minimum of 3.0 FCEs in the second teaching subject.1  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. |  
  • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Mathematical Sciences (Major), Honours Bachelor of Science / Master of Teaching

UTM Mat Sci (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Mathematical Sciences / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Major in Mathematical Sciences
Department of Mathematical & Computational Sciences, University of Toronto Mississauga
Prof. Maria Wesslen, Mathematics Faculty Advisor
Web: www.utm.utoronto.ca/math-cs-stats
Email: maria.wesslen@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Mat Sci (Maj) HBSc / MT: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc) program, then to the MT program and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Mat Sci (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Mathematical Sciences major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program.
- Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Mathematical Sciences, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<td></td>
<td>In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.</td>
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<td>In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs.</td>
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1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Mathematical Sciences (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Mat Sci (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Mathematical Sciences / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher's Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Mathematical Sciences
Department of Mathematical & Computational Sciences, University of Toronto Mississauga
Prof. Maria Wesslen, Mathematics Faculty Advisor
Web: www.utm.utoronto.ca/math-cs-stats
Email: maria.wesslen@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Mat Sci (Spec) HBSc / MT: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc) program, then to the MT program and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Mat Sci (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematical Sciences specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program.
To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for two teaching subjects as follows:
  - Complete the specialist in Mathematical Sciences, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
• The undergraduate degree will include:  
  ♦ the specialist in Mathematical Sciences, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  ♦ a minimum of 3.0 FCEs in the second teaching subject 1.  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. | |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program.  
• 11.0 FCEs during Year 1 and Year 2 of the MT program. | |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Mathematics (Major), Honours Bachelor of Science / Master of Teaching

STG Mat (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Science, Major in Mathematics / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation. Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE), St. George (STG) campus. They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Honours Bachelor of Science, Major in Mathematics / Master of Teaching
www.vic.utoronto.ca/academic-programs/upper-year-programs/combined-degree-program-in-education

Honours Bachelor of Science Program
Faculty of Arts and Science, Victoria College
Web: www.vic.utoronto.ca
Email: vic.academics@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Mat (Maj) HBSc / MT: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc) program, then to the MT program and the CDP.
- In the Spring session of Year 3 of the HBSc program, students apply for conditional admission to the MT program.

STG Mat (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematics major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc degree program:
  o Be registered in Year 3 of the HBSc program.
  o Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
• Have completed or be on course to complete the Education and Society minor program (Victoria College).
• Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Mathematics, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the MT program website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Mathematics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject;  
  o the minor in Education and Society; and  
  o a second minor, which will also qualify as the minimum 3.0 FCEs required for the second teaching subject.  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Mathematics (Major), Honours Bachelor of Science / Master of Teaching

UTSC Mat (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Mathematics / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor's degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-mathematics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mat (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mat (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematics major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program.
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Mathematics, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
  • The undergraduate degree will include:  
    o the major in Mathematics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
    o a minimum of 3.0 FCEs in the second teaching subject.  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Mathematics (Major Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Mat (Maj Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major Co-op in Mathematics / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-co-operative-program-mathematics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mat (Maj Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mat (Maj Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematics major co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major co-op in Mathematics, which fulfils the 6.0 FCEs required for Science-Mathematics as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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      • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
      • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
|       | • The undergraduate degree will include:  
      • the major in co-op in Mathematics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
      • a minimum of 3.0 FCEs in the second teaching subject.¹  
      • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
      • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6| • Remaining courses from Year 1 and Year 2 of the MT program.  
|       | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Mathematics (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Mat (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Mathematics / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-mathematics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mat (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mat (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematics specialist program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing the HBSc program:
- Have a B+ average or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Mathematics, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
- By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.  
- The undergraduate degree will include:  
  - the specialist in Mathematics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.1  
- By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
- In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |  |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program.  
- 11.0 FCEs during Year 1 and Year 2 of the MT program. |  |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Mathematics (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Mat (Spec Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Mathematics / Master of Teaching (MT) is designed for students interested in studying the intersections of math and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-mathematics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mat (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mat (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Mathematics specialist co-op program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.

• Be enrolled full-time and in good standing the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

• Provide at least two letters of reference.

• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.

• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.

• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist co-op in Mathematics, which fulfils the 6.0 FCEs required for Mathematics as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.

    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.

• Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist co-op in Mathematics, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Medicine, Doctor of / Management, Full-Time Option, Master of Business Administration

STG MD / MBA: Introduction

Overview

The Combined Degree Program (CDP): STG, Medicine, Doctor of / Management, Full-Time Option, Master of Business Administration (MD/MBA FT) offered jointly by the Temerty Faculty of Medicine and the Rotman School of Management. The MD/MBA FT CDP is intended for a small number of medical students who have an interest in becoming health sector leaders with management competencies. Graduates of this CDP will be well positioned to act as the health-care executives of tomorrow, in both the public and private sectors. The MBA FT coursework, combined with the MD curriculum, will prepare students for significant leadership opportunities throughout their career.

Students will complete both programs in five years rather than the six years it would take to acquire the degrees independently.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Medicine, Doctor of / Management, Full-Time Option, Master of Business Administration Program
Web: www.rotman.utoronto.ca/Degrees/MastersPrograms/JointDegrees/MDMBA

Doctor of Medicine Program
Temerty Faculty of Medicine
Email: reception.registrar@utoronto.ca

Master of Business Administration Program
Rotman School of Management
Email: ro@rotman.utoronto.ca

STG MD / MBA: Application Process

• Applicants must apply to the Doctor of Medicine (MD) program, the Master of Business Administration (MBA) Full-Time Option, and the CDP.
• Applicants must gain independent admission to both the MD and MBA programs before they may be considered for admission to the CDP.
• Qualified students in Year 3 of the MD degree program apply to the MBA Full-Time Option and the CDP.

STG MD / MBA: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the MD program, the School of Graduate Studies, and the full-time MBA program.
• Applicants must meet the same admission requirements as regular FT MBA applicants, except where noted below:
• Obtain a satisfactory score on the Medical College Admission Test (MCAT).
• Graduate Management Admission Test (GMAT) and Graduate Record Examination (GRE) General Test scores will be waived.
• Provide two references — these can be related to applicants’ MD experience, pre-MD experience, and volunteering, in addition to professional experiences.
• MD students must be in good academic standing.
### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tbody>
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<td>• Year 1 MD program requirements.</td>
<td>• Complete Year 1 courses of the MD program: 6.0 full-course equivalents (FCEs).</td>
</tr>
<tr>
<td>2</td>
<td>• Year 2 MD program requirements.</td>
<td>• Complete Year 2 courses of the MD program: 5.0 FCEs.</td>
</tr>
</tbody>
</table>
| 3    | • Year 3 MD program requirements.  
  • Students apply to the CDP. | • Complete Year 3 courses of the MD program: 27.5 FCEs. |
| 4    | • Year 1 MBA program requirements (including the Summer session). | • Complete Year 1 courses of the MBA program: 9.96 FCEs.  
  • Students may take up to eight electives.  
  • Students will be exempt from taking the following:  
    o RSM1165H Leveraging Diverse Teams (0.17 FCE; Credit/No Credit);  
    o RSM1380H Applied Management Placement (0.5 FCE);  
    o and one Year 2 elective (0.5 FCE). |
| 5    | • Year 4 MD program requirements.  
  • Year 2 MBA program requirements. | • MD program:  
  o Complete Year 4 MD courses (7.5 FCEs).  
  o MD students complete the Canadian Resident Matching Service (CaRMS) process.  
  • MBA program:  
    o Complete Year 2 MBA courses (2.5 FCEs).  
    o Students may take up to five electives. CDP students are subject to the same limits on experiential electives as full-time MBA students at the Rotman School.  
    o Students will be exempt from taking RSM1160H Business Ethics (0.17 FCE). |

### Program Length

4 years

### Time Limit

5 years
STG, Medicine, Doctor of / Doctor of Philosophy

STG MD / PhD: Introduction

Overview

The Combined Degree Program (CDP): STG, Medicine, Doctor of / Doctor of Philosophy is offered jointly by the Temerty Faculty of Medicine and the School of Graduate Studies. Selected and highly qualified students have the opportunity to combine their medical school experience with intensive scientific training in a chosen field. Students in this program are eligible for financial support.

Students carry out research under the supervision of a faculty member at the University and should consult the appropriate department or institute regarding specific research programs.

For a general description of CDPs, see General Regulations section 1.4.3.

Degree Programs in This Combination

Students may combine the MD program with one of the following PhD programs:

- Biochemistry
- Immunology
- Laboratory Medicine and Pathobiology
- Medical Biophysics
- Medical Science
- Molecular Genetics
- Nutritional Sciences
- Pharmacology
- Physiology

Contact

Doctor of Medicine / Doctor of Philosophy Program
Temerty Faculty of Medicine
Web: md.utoronto.ca
Email: mdpd.phd.program@utoronto.ca

STG MD / PhD: Requirements

Minimum Admission Requirements

- Applicants must be accepted by the Temerty Faculty of Medicine and meet the requirements of the School of Graduate Studies and the department in which they intend to carry out their graduate studies.
- Students with a master's degree and medical students are eligible to apply.

Program Requirements

- Applicants may pursue the dual degrees via an integrated or a sequential route.
- **Integrated:** Students with a master's or bachelor's degree enter the MD/PhD program and, within a six- to seven-year period, complete the requirements of the first two years of the MD program and all requirements of the PhD program. During this time, a predetermined program of integration is pursued which provides time allocation for both medical school and graduate study. On completion of the PhD requirements, students return full-time to the medical program.
- **Sequential:** Students with a master's or bachelor's degree enter the medical program on a full-time basis. After 12 to 18 months of medical school, they proceed to full-time graduate work until the PhD requirements are completed. Students then return to medical school to complete the last 2 to 3 years.
UTSC, Management and Accounting (Specialist), Bachelor of Business Administration / Master of Accounting and Finance

UTSC Mgt Acc (Spec) BBA / MAccFin: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Bachelor of Business Administration (BBA), Specialist in Management and Accounting / Master of Accounting and Finance (MAccFin) allows exceptional students who are registered in the Management and Accounting (Specialist) program to apply during Year 2 of their studies and be considered for admission to the MAccFin program. The CDP is designed for students with no prior work experience who are interested in pursuing careers in account management, wealth management, consultancy, and entrepreneurship.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Bachelor of Business Administration Program
University of Toronto Scarborough
Web: www.utsc.utoronto.ca/mgmt/management-accounting
Email: mgmtss@utsc.utoronto.ca

Master of Accounting and Finance Program
University of Toronto Scarborough
Web: www.uoft.me/maccfin
Email: maccfin@utsc.utoronto.ca

UTSC Mgt Acc (Spec) BBA / MAccFin: Application Process

- Applicants must apply to the BBA program, the MAccFin program, and the CDP.
- Qualified students in Year 2 of their BBA program apply to the MAccFin program; those accepted will receive a conditional offer to start the MAccFin program upon completion of their BBA program and degree requirements.
- Students may apply after they have completed up to 10.0 full-course equivalents (FCEs); however, students who have completed more than 10.0 FCEs may not be considered for admission to the program.
- Provide official transcripts.
- Provide at least two reference letters.
- Provide a resumé.
- Applicants will be scored on each admission requirement and then ranked based on their overall score. Top-ranked applicants will be invited for an interview.

UTSC Mgt Acc (Spec) BBA / MAccFin: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MAccFin program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the BBA degree program and the Management and Accounting specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MAccFin program.
- Be enrolled full-time and in good standing in the BBA program.
  - Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 FCEs each year (i.e., complete 5.0 FCEs over three academic sessions: Fall, Winter, Summer).
- Complete all of the requirements of the Management and Accounting specialist program, with the following modifications:
  - MGEC08H3 Economics of Markets and Financial Decision Making replaces 1.0 FCE in C-level Economics courses;
Students are exempted from MGEB12H3 Quantitative Methods in Economics II and MGAD70H3 Advanced Accounting Case Analysis: A Capstone Course.

Students must complete MGF10H3 Investments (0.5 FCE in Finance courses):
- In the Summer session of Year 3 of their undergraduate studies, students must complete the following graduate courses; the 1.0 FCE in graduate courses will be graded as graduate courses, as per the University Assessment and Grading Practices and Policy, 2020 (section B.4.1.2), and will count towards both the BBA degree and the MAccFin program and degree:
  - MAF2001H Economics and Quantitative Methods (0.5 FCE);
  - MAF2002H Advanced Corporate Finance (0.5 FCE).

Students are required to complete all of the following advanced accounting courses, which are necessary for Chartered Professional Accountant (CPA) designation: MGAD20H3, MGAD40H3, MGAD45H3, MGAD50H3, and MGAD65H3.

To be given full, unconditional admission to the MAccFin program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the BBA program or over upper-level (C- and D-level) courses.
- Students must have completed the following courses: MGAB02H3, MGAB03H3, MGAC01H3, MGFB10H3, and MGEB11H3, and have achieved a minimum grade of C+ (65%) in each course and an overall average of B+ (77%) across the courses.
- Students must have successfully completed specific non-core courses as determined by their undergraduate degree, and must have successfully completed specific core courses with a minimum grade of C+ (65%) in each course and an overall average of B (73%) across all core courses.
- Be conferred with the BBA degree.

**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 4 | BBA degree requirements. | Students must complete all BBA program requirements, with the modifications described above, and the degree requirements.  
Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
By the end of the Summer session of Year 3, students who receive a conditional offer of admission to the CDP must complete MAF2001H and MAF2002H. These courses (1.0 FCE) are counted towards the completion of both the BBA degree and MAccFin degree.  
By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements. |
| 5 and 6 | Remaining MAccFin program requirements. | Conditions of admission are removed following the student’s graduation from the BBA program.  
Sessions 1 to 4: students must complete the remaining 7.5 FCEs of the MAccFin program and degree requirements. |
UTSC, Management and Accounting (Specialist Co-op), Bachelor of Business Administration / Master of Accounting and Finance

UTSC Mgt Acc (Spec Co-op) BBA / MAccFin: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Bachelor of Business Administration (BBA), Specialist Co-op in Management and Accounting / Master of Accounting and Finance (MAccFin) allows exceptional students who are registered in the Management and Accounting (Specialist Co-op) program to apply during Year 2 of their studies and be considered for admission to the MAccFin program. The CDP is designed for students with no prior work experience who are interested in pursuing careers in account management, wealth management, consultancy, and entrepreneurship.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Bachelor of Business Administration Program
University of Toronto Scarborough
Web: www.utsc.utoronto.ca/mgmt/management-accounting
Email: mgmtss@utsc.utoronto.ca

Master of Accounting and Finance Program
University of Toronto Scarborough
Web: www.uoft.me/maccfin
Email: maccfin@utsc.utoronto.ca

UTSC Mgt Acc (Spec Co-op) BBA / MAccFin: Application Process

- Applicants must apply to the BBA program, the MAccFin program, and the CDP.
- Qualified students in Year 2 of their BBA program apply to the MAccFin program; those accepted will receive a conditional offer to start the MAccFin program upon completion of their BBA program and degree requirements.
- Students may apply after they have completed up to 10.0 full-course equivalents (FCEs); however, students who have completed more than 10.0 FCEs may not be considered for admission to the program.
- Provide official transcripts.
- Provide at least two reference letters.
- Provide a resumé.
- Applicants will be scored on each admission requirement and then ranked based on their overall score. Top-ranked applicants will be invited for an interview.

UTSC Mgt Acc (Spec Co-op) BBA / MAccFin: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MAccFin program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the BBA degree program and the Management and Accounting specialist co-op program.
- Meet the admission requirements of the School of Graduate Studies and the MAccFin program.
- Be enrolled full-time and in good standing in the BBA program.
  - Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 FCEs each year (i.e., complete 5.0 FCEs over three academic sessions: Fall, Winter, Summer).
Complete all of the requirements of the Management and Accounting specialist co-op program, with the following modifications:
- MGEC08H3 *Economics of Markets and Financial Decision Making* replaces 1.0 FCE in C-level Economics courses;
- Students are exempted from MGB12H3 *Quantitative Methods in Economics II* and MGAD70H3 *Advanced Accounting Case Analysis: A Capstone Course*;
- Students must complete MGFD10H3 *Investments* (0.5 FCE in Finance courses);
- In the Summer session of Year 3 of their undergraduate studies, students must complete the following graduate courses; the 1.0 FCE in graduate courses will be graded as graduate courses, as per the *University Assessment and Grading Practices and Policy, 2020* (section B.4.1.2), and will count towards both the BBA degree and the MAccFin program and degree:
  - MAF2001H *Economics and Quantitative Methods* (0.5 FCE);
  - MAF2002H *Advanced Corporate Finance* (0.5 FCE).

Students are required to complete all of the following advanced accounting courses, which are necessary for Chartered Professional Accountant (CPA) designation: MGAD20H3, MGAD40H3, MGAD45H3, MGAD50H3, and MGAD65H3.

To be given full, unconditional admission to the MAccFin program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the BBA program or over upper-level (C- and D-level) courses.
- Students must have completed the following courses: MGAB02H3, MGAB03H3, MGAC01H3, MGFB10H3, and MGB11H3, and have achieved a minimum grade of C+ (65%) in each course and an overall average of B+ (77%) across the courses.
- Students must have successfully completed specific non-core courses as determined by their undergraduate degree, and must have successfully completed specific core courses with a minimum grade of C+ (65%) in each course and an overall average of B (73%) across all core courses.
- Be conferred with the BBA degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
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</table>
| 1 to 4 | BBA degree requirements. | - Students must complete all BBA program requirements, with the modifications described above, and the degree requirements.  
- Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
- By the end of the Summer session of Year 3, students who receive a conditional offer of admission to the CDP must complete MAF2001H and MAF2002H. These courses (1.0 FCE) are counted towards the completion of both the BBA degree and MAccFin degree.  
- By the end of Year 4, fulfill both the undergraduate program requirements and the undergraduate degree requirements. |
| 5 and 6 | Remaining MAccFin program requirements. | - Conditions of admission are removed following the student’s graduation from the BBA program.  
- Sessions 1 to 4: students must complete the remaining 7.5 FCEs of the MAccFin program and degree requirements. |
UTSC, Mental Health Studies (Specialist), Honours Bachelor of Science / Master of Social Work

UTSC MHS (Spec) HBSc / MSW: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Mental Health Studies / Master of Social Work (MSW) provides a rich intellectual pathway for exceptional undergraduate students pursuing a career in social work. The CDP gives students access to social work research before they complete their undergraduate degree.

Students have an opportunity to become equipped for evidence-informed social work practice, through a research course in Year 4, with a Factor-Inwentash Faculty of Social Work co-supervisor.

The CDP allows well-qualified students in this specialist undergraduate program to apply during Year 3 and be considered for admission into the MSW two-year full-time program.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mental Health Studies (Specialist), Honours Bachelor of Science / Master of Social Work
socialwork.utoronto.ca/programs/msw/msw-combined-programs

Honours Bachelor of Science Program
Department of Psychology, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/psych
Email: psychology-undergraduate@utsc.utoronto.ca

Master of Social Work Program
Factor-Inwentash Faculty of Social Work
Web: socialwork.utoronto.ca/programs/msw
Email: admissions.fsw@utoronto.ca

UTSC MHS (Spec) HBSc / MSW: Application Process

• Applicants must apply to the HBSc program, the MSW program, and the CDP.
• Qualified students in Year 3 of their HBSc program apply to the MSW program; those accepted will receive a conditional offer to start the MSW program upon completion of their HBSc program requirements.

UTSC MHS (Spec) HBSc / MSW: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MSW program.
• Applicants to the HBSc program must:
  o be enrolled full-time and in good standing;
  o have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2;
  o carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Applicants to the MSW program must:
  o maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program;
  o complete the requirements of their HBSc program;
  o be conferred with the HBSc degree.
### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
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<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 4 | ● HBSc degree requirements.  
● Students must complete all HBSc program requirements and degree requirements.  
● Students are expected to carry a full course load of 5.0 full-course equivalents (FCEs) over the three academic sessions (Fall, Winter, Summer) of each year.  
● In Year 3, qualified students may apply to the MSW program and the CDP and may be offered conditional admission.  
● In Year 4, students who receive a conditional offer of admission to the CDP must complete 1.5 FCEs as follows:  
  ○ UTSC D-level research course PSYD98Y3 *Thesis in Psychology* under the supervision of a UTSC Psychology faculty member in consultation with a Social Work faculty member (1.0 FCE).  
  ○ UTSC D-level course PSYD37H3 *The Social Context of Mental Health and Illness* (0.5 FCE).  
● By the end of Year 4, fulfil both the undergraduate program requirements and the undergraduate degree requirements. |  |
| 5 | ● MSW Year 1 program requirements.  
● Students must select a specialization by the end of Year 1 of the MSW program.  
● Conditions of admission are removed.  
● Students must complete 4.0 FCEs as follows: SWK4102H, SWK4103H, SWK4105H, SWK4107H, SWK4510H, SWK4602H, SWK4605H, SWK4654H.  
● Student must complete the Year 1 practicum (SWK4701H†).  
● By the end of Year 1 of the MSW program, students must select one of the following fields of specializations: Children and Their Families; Gerontology; Health and Mental Health; Social Justice and Diversity; Social Service Administration. |  |
| 6 | ● MSW Year 2 program requirements.  
● In Year 2 of the MSW program, all students complete 1.0 FCE in electives, the Year 2 practicum (SWK4702Y), and additional courses in their chosen field of specialization:  
  ○ Children and Their Families: SWK4514H, SWK4608H, SWK4620H, SWK4625H.  
  ○ Gerontology: AGE2000H, SWK4513H, SWK4612Y, SWK4618H.  
  ○ Health and Mental Health: SWK4412H, SWK4511H, and *either*: SWK4622H and SWK4604H, or SWK4622H and SWK4632H, or SWK4604H and SWK4631H.  
  ○ Social Justice and Diversity: SWK4304H, SWK4306H, SWK4512H, SWK4606H.  
  ○ Social Service Administration: SWK4425H, SWK4426H, SWK4427H, SWK4515H. |  |

* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
UTSC, Mental Health Studies (Specialist Co-op), Honours Bachelor of Science / Master of Social Work

UTSC MHS (Spec Co-op) HBSc / MSW: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Mental Health Studies / Master of Social Work (MSW) provides a rich intellectual pathway for exceptional undergraduate students pursuing a career in social work. The CDP gives students access to social work research before they complete their undergraduate degree.

Students have an opportunity to become equipped for evidence-informed social work practice, through a research course in Year 4, with a Factor-Inwentash Faculty of Social Work co-supervisor.

The CDP allows well-qualified students in this specialist undergraduate program to apply during Year 3 and be considered for admission into the MSW two-year full-time program.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Mental Health Studies (Specialist), Honours Bachelor of Science / Master of Social Work
socialwork.utoronto.ca/programs/msw/msw-combined-programs

Honours Bachelor of Science Program
Department of Psychology, University of Toronto Scarborough
Web: www.utsc.utoronto.ca/psych
Email: psychology-undergraduate@utsc.utoronto.ca

Master of Social Work Program
Factor-Inwentash Faculty of Social Work
Web: socialwork.utoronto.ca/programs/msw
Email: admissions.fsw@utoronto.ca

UTSC MHS (Spec Co-op) HBSc / MSW: Application Process

• Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MSW program, and the CDP.
• Qualified students in Year 3 of the HBSc program apply to the MSW program; those accepted will receive a conditional offer to start the MSW program upon completion of their HBSc program requirements.

UTSC MHS (Spec Co-op) HBSc / MSW: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MSW program.
• Applicants to the HBSc program must:
  o be enrolled full-time and in good standing;
  o have a B+ average (CGPA of 3.3) or higher in Year 2;
  o carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Applicants to the MSW program must:
  o maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program;
  o complete the requirements of their HBSc program;
  o be conferred with the HBSc degree.
**Academic Path to Completion**

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
</table>
| 1 to 4 | | • HBSc degree requirements.  
• Work terms to fulfill the co-op requirement. |
| | | • Students must complete all HBSc program requirements and degree requirements.  
• Students are expected to carry a full course load of **5.0 full-course equivalents (FCEs)** over the three academic sessions (Fall, Winter, Summer) of each year.  
• In Year 3, qualified students may apply to the MSW program and the CDP and may be offered conditional admission.  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete 1.5 FCEs as follows:  
  o UTSC D-level research course PSYD98Y3 *Thesis in Psychology* under the supervision of a UTSC Psychology faculty member in consultation with a Social Work faculty member (1.0 FCE).  
  o UTSC D-level course PSYD37H3 *The Social Context of Mental Health and Illness* (0.5 FCE).  
• By the end of Year 4, fulfill both the undergraduate program requirements and the undergraduate degree requirements. |
| 5 | MSW Year 1 program requirements.  
Students must select a specialization. | Conditions of admission are removed.  
• Students must complete **4.0 FCEs** as follows: SWK4102H, SWK4103H, SWK4105H, SWK4107H, SWK4510H, SWK4602H, SWK4605H, SWK4654H.  
• Students must complete the Year 1 practicum (SWK4701H*).  
• By the end of Year 1 of the MSW program, students must select one of the following fields of specializations: Children and Their Families; Gerontology; Health and Mental Health; Social Justice and Diversity; or Social Service Administration. |
| 6 | MSW Year 2 program requirements. | In Year 2 of the MSW program, all students complete **1.0 FCE** in electives, the Year 2 practicum (SWK4702Y), and additional courses in their chosen field of specialization:  
  o Children and Their Families: SWK4514H, SWK4608H, SWK4620H, SWK4625H.  
  o Gerontology: AGE2000H, SWK4513H, SWK4612Y, SWK4618H.  
  o Health and Mental Health: SWK4412H, SWK4511H, and either: SWK4622H and SWK4604H*, or SWK4622H and SWK4632H, or SWK4604H* and SWK4631H.  
  o Social Justice and Diversity: SWK4304H, SWK4306H, SWK4512H, SWK4606H.  
  o Social Service Administration: SWK4425H, SWK4426H, SWK4427H, SWK4515H.  
• *Students who have completed the specialist co-op in Mental Health Studies are exempt from SWK4604H and must replace this with another SWK elective.  
* Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.
UTM, Molecular Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTM Mol Bio (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Molecular Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of biology and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Specialist in Molecular Biology
Department of Biology, University of Toronto Mississauga
Diane Matias, Undergraduate Advisor
Web: www.utm.utoronto.ca/biology
Email: d.matias@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Mol Bio (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Mol Bio (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Molecular Biology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
• Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children.

With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Molecular Biology, which fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, or Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
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<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
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</table>
| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Molecular Biology, where the course requirements will fulfil 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject. ¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Molecular Biology and Biotechnology (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Mol Bio Biotech (Spec) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Molecular Biology and Biotechnology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-molecular-biology-and-biotechnology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mol Bio Biotech (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mol Bio Biotech (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Molecular Biology and Biotechnology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Molecular Biology and Biotechnology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements. | • The undergraduate degree will include:
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. |  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. |
  • The specialist in Molecular Biology and Biotechnology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and |
  • a minimum of 3.0 FCEs in the second teaching subject.† |
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science). |
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

† The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Molecular Biology and Biotechnology (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Mol Bio Biotech (Spec Co-op) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist Co-op in Molecular Biology and Biotechnology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-molecular-biology-and-biotechnology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mol Bio Biotech (Spec Co-op) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mol Bio Biotech (Spec Co-op) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Molecular Biology and Biotechnology specialist co-op program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing in the HBSc program:
  - Have a B+ average or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist co-op in Molecular Biology and Biotechnology, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  - the specialist co-op in Molecular Biology and Biotechnology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  - a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Molecular Biology, Immunology and Disease / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-molecular-biology-immunology-and-disease-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Mol Bio Imm Dis (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Mol Bio Imm Dis (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Molecular Biology, Immunology and Disease major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Molecular Biology, Immunology and Disease, which fulfils the 6.0 FCEs required for Science-Biology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<tr>
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<th>Specific Requirements*</th>
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| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Molecular Biology, Immunology and Disease, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹ |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Music Education (Stream), Bachelor of Music / Master of Teaching

STG Mus MusEd MusBac / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Bachelor of Music, Music, Stream in Music Education / Master of Teaching (MT) is designed for Music Education students who are interested in pursuing a teaching career to gain early, conditional admission to the Master of Teaching program.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree and an accredited professional MT degree, and will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Bachelor of Music Program, Faculty of Music
Web: music.utoronto.ca/programs.php
Email: registrar.music@utoronto.ca

Master of Teaching Program, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Mus MusEd MusBac / MT: Application Process

- Applicants must apply to the Bachelor of Music (MusBac) program (Stream in Music Education), the MT program, and the CDP.
- Applicants must gain independent admission to both the MusBac (Stream in Music Education) and MT programs before they may be considered for admission to the CDP.

STG Mus MusEd MusBac / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the MusBac (Stream in Music Education) degree program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the MusBac (Stream in Music Education) program:
  - Have a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in Year 2.
  - Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants should list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the MusBac (Stream in Music Education) program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the MusBac (Stream in Music Education) program, which fulfils the 6.0 FCEs required for Music-Instrumental or Music-Vocal as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their MusBac (Stream in Music Education) academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the MusBac (Stream in Music Education) degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | • MusBac (Stream in Music Education) degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o a minimum of 6.0 FCEs in the first teaching subject: Music-Instrumental or Music-Vocal; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the MusBac (Stream in Music Education) and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Pharmacy, Doctor of / Management, Master of Business Administration

STG PharmD / MBA: Introduction

Overview

The Leslie Dan Faculty of Pharmacy (LDFP) and the Rotman School of Management offer the Combined Degree Program (CDP): STG, Doctor of Pharmacy / Management, Master of Business Administration. Unique in Canada, this CDP provides graduates with unparalleled opportunities for leadership within the health-care and pharmaceutical manufacturing sectors. The CDP permits completion of both the Doctor of Pharmacy (PharmD) and Full-Time Master of Business Administration (MBA) programs in less time than it would take to acquire them separately.

The CDP is only open to applicants who have completed a bachelor’s degree (e.g., BA, BSc, BEng) prior to enrolling in the PharmD program and who have successfully completed admission requirements for entry to the Full-Time MBA program.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Doctor of Pharmacy / Management, Master of Business Administration

pharmacy.utoronto.ca/programs/pharmd-mba
www.rotman.utoronto.ca/Degrees/MastersPrograms/JointDegrees/PharmDMBA

Doctor of Pharmacy Program
Leslie Dan Faculty of Pharmacy
Web: pharmacy.utoronto.ca/programs/doctor-pharmacy-pharmd
Email: pharmdmba@phm.utoronto.ca

Master of Business Administration Program
Rotman School of Management
Web: www.rotman.utoronto.ca/Degrees/MastersPrograms/MBAPrograms/FullTimeMBA
Email: mba@rotman.utoronto.ca

STG PharmD / MBA: Application Process

- Applicants must apply to the PharmD program, the MBA program, and the CDP.
- Applicants may be considered for admission to the CDP after they have gained independent admission to both the PharmD and MBA programs.
- Applicants are required to:
  - Be enrolled full-time in the PharmD program
  - Complete all Year 2 PharmD requirements successfully
  - Be in good academic standing
  - Meet the admission requirements of the two-year MBA program. There are five admission rounds, each with their own deadlines. Applicants to the CDP must apply in round 1 or 2 in order to be considered for admission.

STG PharmD / MBA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the PharmD program, the School of Graduate Studies, and the MBA program.
- Complete all required PharmD coursework and clinical rotations successfully prior to starting the MBA program.
- Apply the first session of coursework in the MBA program as fulfilling the elective requirement for the PharmD program.
## Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
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<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 and 2 | • PharmD program requirements.  
• Apply to the MBA program in Year 2. | • Complete Year 1 and Year 2 PharmD courses and gain acceptance to the MBA program.  
• At the end of Year 2 in May, complete Early Practice Experience II (EPE II).  
• Complete clinical rotation requirements including the Transitional Pharmacy Practice Experience I (TPPE I), a five-week CDP experiential education rotation that will generally run from late July to late August. This TPPE rotation satisfies PharmD clinical rotation requirements for the PharmD degree. |
| 3 | • PharmD program requirements. | • Complete all required and elective PharmD courses for the Fall session. Students may choose to take PHM389 *Research Project*.  
• In early January, complete an Experiential APPE Transition course before starting Advanced Pharmacy Practice Experience (APPE) rotations.  
• From January to August, complete six APPE rotations organized by the Office of Experiential Education. |
| 4 and 5 | • Final PharmD program requirements.  
• MBA program requirements. | • MBA courses taken in the Fall session of Year 4 will count as electives toward the PharmD program requirements.  
• Complete remaining MBA program requirements in the Winter session of Year 4 and Fall and Winter sessions of Year 5.  
• Specific restrictions apply for students who wish to take MBA experiential learning courses. Please refer to the MBA program requirements for more information. |

## Program Length

5 years

## Time Limit

6 years
Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Physical and Mathematical Sciences / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-physical-and-mathematical-sciences-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Phy Mat Sci (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Phy Mat Sci (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Physical and Mathematical Sciences specialist program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the specialist in Physical and Mathematical Sciences, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>HBSc degree requirements.</td>
<td>A minimum of 20.0 FCEs in undergraduate courses. This includes:</td>
</tr>
<tr>
<td></td>
<td>In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.</td>
<td>o the specialist in Physical and Mathematical Sciences, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and</td>
</tr>
<tr>
<td></td>
<td>By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements.</td>
<td>o a minimum of 3.0 FCEs in the second teaching subject.¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree (20.0 FCEs) and MT degree (10.0 FCEs).</td>
</tr>
<tr>
<td>5 and 6</td>
<td>Remaining courses from Year 1 and Year 2 of the MT program.</td>
<td>11.0 FCEs during Year 1 and Year 2 of the MT program.</td>
</tr>
</tbody>
</table>

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Physical Education and Health, Bachelor of Physical and Health Education / Master of Teaching

STG PEH BPHE / MT: Introduction

This combined degree program will close on August 31, 2025.

Overview

The Combined Degree Program (CDP): STG, Bachelor of Physical and Health Education / Master of Teaching (MT) is designed for students interested in studying the intersections of kinesiology and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a Bachelor of Physical and Health Education (BPHE) degree from the Faculty of Kinesiology and Physical Education and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Bachelor of Physical and Health Education Program
Faculty of Kinesiology and Physical Education
Web: kpe.utoronto.ca
Email: undergrad.kpe@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG PEH BPHE / MT: Application Process

- Applicants apply to the BPHE program, the MT program, and the CDP.
- Applicants may apply to the CDP in Year 3 of the BPHE program for an early conditional admission to the MT program.

STG PEH BPHE / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the BPHE program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the BPHE program.
  o Have a cumulative grade point average (CGPA) of between 3.15 and 3.49 or higher, normally demonstrated by an average grade in Year 2 of the BPHE program.
  o Have completed at least half of the teaching subjects' prerequisite courses—i.e., 3.0 full-course equivalents [FCEs] in the first teaching subject and a minimum of 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a CGPA of between 3.15 and 3.49 or higher in their final year of study in the BPHE program.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete 6.0 FCEs in the first teaching subject (i.e., health and physical education).
  o Complete a minimum of 3.0 FCEs in the second teaching subject. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their BKin academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the BPHE degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
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<tr>
<th>Year</th>
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<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>• BPHE degree requirements.</td>
<td>• The undergraduate degree will include:</td>
</tr>
<tr>
<td></td>
<td>• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.</td>
<td>o a minimum of 6.0 FCEs in the first teaching subject (i.e., health and physical</td>
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<tr>
<td></td>
<td>• By the end of Year 4, fulfil both the undergraduate program requirements</td>
<td>education);</td>
</tr>
<tr>
<td></td>
<td>and undergraduate degree requirements.</td>
<td>o a minimum of 3.0 FCEs in the second teaching subject¹.</td>
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<tr>
<td></td>
<td></td>
<td>• By the end of Year 3, complete at least half of the teaching subjects' prerequisite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In Year 4, students who receive a conditional offer of admission to the CDP complete</td>
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<td></td>
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<td>any two of the elective half courses recommended for CDP students. These courses</td>
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<tr>
<td></td>
<td></td>
<td>(1.0 FCE) are counted towards the completion of both the BPHE and MT degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>programs.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>• Remaining courses from Year 1 and Year 2 of the MT program.</td>
<td>11.0 FCEs during Year 1 and Year 2 of the MT program.</td>
</tr>
</tbody>
</table>

¹ Note that the teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

*The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Physics (Major), Honours Bachelor of Science / Master of Teaching

UTM Phy (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Physics / Master of Teaching (MT) is designed for students interested in studying the intersections of physics and education. Students may apply studies in these areas towards professional training leading to teacher certification.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor's degree from the University of Toronto Mississauga (UTM) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program, Major in Physics
Department of Chemical & Physical Sciences, University of Toronto Mississauga
Christina Fortes, Academic Counsellor
Web: www.utm.utoronto.ca/cps
Email: christina.fortes@utoronto.ca

Master of Teaching Program
Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTM Phy (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTM Phy (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Physics major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
- Be enrolled full-time and in good standing in the HBSc program:
To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (CGPA of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Physics, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
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</tr>
</thead>
</table>
| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Physics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Physics and Astrophysics (Major), Honours Bachelor of Science / Master of Teaching

UTSC Phy Ast (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Physics and Astrophysics / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-physics-and-astrophysics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Phy Ast (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Phy Ast (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Physics and Astrophysics major program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Physics and Astrophysics, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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</table>
| 1 to 4 | • HBSc degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Physics and Astrophysics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
• By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |

| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Specialist in Physics and Astrophysics / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-physics-and-astrophysics-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Phy Ast (Spec) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Phy Ast (Spec) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Physics and Astrophysics specialist program.
Meet the admission requirements of the School of Graduate Studies and the MT program.

Be enrolled full-time and in good standing in the HBSc program:
- Have a B+ average or higher in Year 2.
- Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

Provide at least two letters of reference.

Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resume, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for two teaching subjects as follows:
  - Complete the specialist in Physics and Astrophysics, which fulfils the 6.0 FCEs required for Science-Physics as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  - Students should consult often with their HBSc academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
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</table>
| 1 to 4 | • HBSc degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Physics and Astrophysics, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Plant Biology (Major), Honours Bachelor of Science / Master of Teaching

UTSC Pla Bio (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Science, Major in Plant Biology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-plant-biology-science
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Pla Bio (Maj) HBSc / MT: Application Process

- Applicants must apply to the Honours Bachelor of Science (HBSc) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBSc degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBSc program and degree requirements.

UTSC Pla Bio (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBSc degree program and the Plant Biology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.

• Be enrolled full-time and in good standing in the HBSc program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).

• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.

• Provide at least two letters of reference.

• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.

• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.

• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.

• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Plant Biology, which fulfills the 6.0 FCEs required for Science-Biology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.

• Students should consult often with their HBSc academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.

• Be conferred with the HBSc degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
</table>
| 1 to 4 | HBSc degree requirements.  
  In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | The undergraduate degree will include:  
  o the major in Plant Biology, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc degree and MT degree programs. |
| 5 and 6 | Remaining courses from Year 1 and Year 2 of the MT program. | 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Psychology (Major), Honours Bachelor of Science / Master of Teaching

STG Psy (Maj) HBSc / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Science, Major in Psychology / Master of Teaching (MT) is designed for students interested in studying the intersections of psychology and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor’s degree from the Faculty of Arts and Science and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE), St. George (STG) campus. They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Honours Bachelor of Science, Major in Psychology / Master of Teaching
www.vic.utoronto.ca/academic-programs/upper-year-programs/combined-degree-program-in-education

Honours Bachelor of Science Program
Faculty of Arts and Science, Victoria College
Web: www.vic.utoronto.ca
Email: vic.academics@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Psy (Maj) HBSc / MT: Application Process

- Applicants apply to the Honours Bachelor of Science (HBSc) program, then to the MT program and the CDP.
- In the Spring session of Year 3 of the HBSc program, students apply for conditional admission to the MT program.

STG Psy (Maj) HBSc / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:
• Be admitted to the HBSc degree program and the Psychology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBSc degree program:
  o Be registered in Year 3 of the HBSc program.
  o Have an average grade equivalent to at least a B+, normally demonstrated by an average grade in Year 2.
• Have completed or be on course to complete the Education and Society minor program (Victoria College).
• Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given **full, unconditional admission to the MT program**, applicants must meet the following admission requirements:

• Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBSc program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Psychology, which fulfils the 6.0 FCEs required for Psychology as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the [MT program website](#) for more information.
• Be conferred with the HBSc degree.

### Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Progression</th>
<th>Specific Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>• HBSc degree requirements.&lt;br&gt;• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.&lt;br&gt;• By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements.</td>
<td>• The undergraduate degree will include:&lt;br&gt;  o the major in Psychology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject;&lt;br&gt;  o the minor in Education and Society; and&lt;br&gt;  o a second minor, which will also qualify as the minimum 3.0 FCEs required for the second teaching subject1.&lt;br&gt;• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).&lt;br&gt;• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBSc and MT degree programs.</td>
</tr>
<tr>
<td>5 and 6</td>
<td>• Remaining courses from Year 1 and Year 2 of the MT program.</td>
<td>11.0 FCEs during Year 1 and Year 2 of the MT program.</td>
</tr>
</tbody>
</table>

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTM, Psychology (Major), Honours Bachelor of Science / Child Study and Education, Master of Arts

UTM Psy (Maj) HBSc / CSE MA: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Major in Psychology / Child Study and Education, Master of Arts is designed for students interested in studying human development and related areas, such as diversity and inclusion. Students may apply studies in these areas towards professional training leading to teacher certification.

This CDP permits the completion of both degrees in six years. One full graduate course (1.0 full-course equivalent [FCE]) can be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science, Major in Psychology / Child Study and Education, Master of Arts
www.oise.utoronto.ca/jics/ma-cse-program/combined-degree-programs

Honours Bachelor of Science Program, Major in Psychology
Department of Psychology, University of Toronto Mississauga
Prof. Stuart Kamenetsky, Undergraduate Director and Program Advisor
Web: www.utm.utoronto.ca/psychology/welcome-psychology-utm
Email: stuart.kamenetsky@utoronto.ca

Master of Arts Program
Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/jics/ma-cse-program
Email: cse.program@utoronto.ca

UTM Psy (Maj) HBA / CSE MA: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MA in Child Study and Education (MA-CSE) program, and the CDP.

UTM Psy (Maj) HBSc / CSE MA: Requirements

Minimum Admission Requirements

- Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
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<th>Year</th>
<th>Progression</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.</td>
<td>• 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.</td>
</tr>
<tr>
<td>2</td>
<td>• Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.</td>
<td>• 5.0 FCEs toward the HBSc program and degree requirements.</td>
</tr>
</tbody>
</table>
| 3    | • Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.  
• Graduate courses in accordance with the U of T regulations for the MA program. | • 5.0 FCEs toward the HBSc program and degree requirements.  
• In the Winter session, students apply to the MA program. Upon conditional acceptance, they may apply to the CDP. |
| 4    | • Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program. | • 5.0 FCEs as follows:  
• 4.0 FCEs toward the HBSc program and degree requirements.  
• 1.0 FCE in MA elective courses in the spring and summer between Year 3 and Year 4; this will be counted toward the overall requirements of the HBSc and MA degree requirements. This 1.0 FCE is chosen from among master's-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the Applied Psychology and Human Development calendar entry. Students without an undergraduate course in child development must take APD1201H Child and Adolescent Development as an elective.  
• Upon degree conferral, students apply to the MA program in order to lift conditions of admission. |
| 5 and 6 | • Remaining graduate courses in accordance with the U of T regulations for the MA program. | • 10.0 FCEs in MA program requirements. See the Child Study and Education program entry for full course requirements.  
• Note that students will have previously completed the 1.0 FCE in electives in the Spring and Summer sessions of Year 3 and Year 4 of the HBSc program. |
UTM, Psychology (Specialist), Honours Bachelor of Science / Child Study and Education, Master of Arts

UTM Psy (Spec) HBSc / CSE MA: Introduction

Overview

The Combined Degree Program (CDP): UTM, Honours Bachelor of Science, Specialist in Psychology / Child Study and Education, Master of Arts is designed for students interested in studying human development and related areas, such as diversity and inclusion. Students may apply studies in these areas towards professional training leading to teacher certification.

This CDP permits the completion of both degrees in six years. One full graduate course (1.0 full-course equivalent [FCE]) can be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Science, Specialist in Psychology / Child Study and Education, Master of Arts
www.oise.utoronto.ca/jics/ma-cse-program/combined-degree-programs

Honours Bachelor of Science Program, Specialist in Psychology
Department of Psychology, University of Toronto Mississauga
Prof. Stuart Kamenetsky, Undergraduate Director and Program Advisor
Web: www.utm.utoronto.ca/psychology/welcome-psychology-utm
Email: stuart.kamenetsky@utoronto.ca

Master of Arts Program
Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/jics/ma-cse-program
Email: cse.program@utoronto.ca

UTM Psy (Spec) HBSc / CSE MA: Application Process

• Applicants must apply to the Honours Bachelor of Science (HBSc) program, the Master of Arts (MA) program, and the CDP.

• Applicants must gain independent admission to both the HBSc and MA programs before they may be considered for admission to the CDP.

UTM Psy (Spec) HBSc / CSE MA: Requirements

Minimum Admission Requirements

• Applicants must meet the admission requirements of the HBSc program, the School of Graduate Studies, and the MA program.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.
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<tr>
<td>1</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.</td>
<td>5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.</td>
</tr>
<tr>
<td>2</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.</td>
<td>5.0 FCEs toward the HBSc program and degree requirements.</td>
</tr>
<tr>
<td>3</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program. Graduate courses in accordance with the U of T regulations for the MA program.</td>
<td>5.0 FCEs toward the HBSc program and degree requirements. In the Winter session, students apply to the MA program. Upon conditional acceptance, they may apply to the CDP.</td>
</tr>
<tr>
<td>4</td>
<td>Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.</td>
<td>5.0 FCEs as follows: 4.0 FCEs toward the HBSc program and degree requirements. 1.0 FCE in MA elective courses in the spring and summer between Year 3 and Year 4; this will be counted toward the overall requirements of the HBSc and MA degree requirements. This 1.0 FCE is chosen from among master's-level courses in the Department of Applied Psychology and Human Development and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the Applied Psychology and Human Development calendar entry. Students without an undergraduate course in child development must take APD1201H Child and Adolescent Development as an elective. Upon degree conferral, students apply to the MA program in order to lift conditions of admission.</td>
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<tr>
<td>5 and 6</td>
<td>Remaining graduate courses in accordance with the U of T regulations for the MA program.</td>
<td>10.0 FCEs in MA program requirements. See the Child Study and Education program entry for full course requirements. Note that students will have previously completed the 1.0 FCE in electives in the Spring and Summer sessions of Year 3 and Year 4 of the HBSc program.</td>
</tr>
</tbody>
</table>
UTSC, Socio-Cultural Anthropology (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Soc Ant (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in Socio-Cultural Anthropology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-socio-cultural-anthropology-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Soc Ant (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP. Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Soc Ant (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Socio-Cultural Anthropology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today’s schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Socio-Cultural Anthropology, which fulfils the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    · Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Specific Requirements*</th>
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</thead>
</table>
| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Socio-Cultural Anthropology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject, and  
  o a minimum of 3.0 FCEs in the second teaching subject.¹  
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Socio-Cultural Anthropology (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC Soc Ant (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in Socio-Cultural Anthropology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-socio-cultural-anthropology-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Soc Ant (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Soc Ant (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Socio-Cultural Anthropology specialist program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average or higher in their final year of study in the HBA program or upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Socio-Cultural Anthropology, which fulfills the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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<th>Year</th>
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| 1 to 4 | • HBA degree requirements.
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.
  • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:
  o the specialist in Socio-Cultural Anthropology, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and
  o a minimum of 3.0 FCEs in the second teaching subject.¹
  • By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
STG, Sociology (Major), Honours Bachelor of Arts / Master of Teaching

STG Soc (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): STG, Honours Bachelor of Arts, Major in Sociology / Master of Teaching (MT) is designed for students interested in studying the intersections of sociology and education, coupled with professional teacher preparation. Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn a bachelor's degree from the Faculty of Arts and Science and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE), St. George (STG) campus. They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

• early application to the MT program (in Year 3) and conditional admission to the MT program;
• eligibility for certification as a teacher in Ontario; and
• eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees. For a general description of CDPs, see General Regulations section 1.4.3.

Contact

STG, Honours Bachelor of Arts, Major in Sociology / Master of Teaching
www.vic.utoronto.ca/academic-programs/upper-year-programs/combined-degree-program-in-education

Honours Bachelor of Arts Program
Faculty of Arts and Science, Victoria College
Web: www.vic.utoronto.ca
Email: vic.academics@utoronto.ca

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

STG Soc (Maj) HBA / MT: Application Process

• Applicants apply to the Honours Bachelor of Arts (HBA) program, then to the MT program and the CDP.
• In the Spring session of Year 3 of the HBA program, students apply for conditional admission to the MT program.

STG Soc (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBA degree program and the Sociology major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA degree program:
- Be registered in Year 3 of the HBA program.
- Have an average grade equivalent to at least a B+, normally demonstrated by an average grade in Year 2.
- Have completed or be on course to complete the Education and Society minor program (Victoria College).
- Have completed at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 full-course equivalents [FCEs] in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
- Provide at least two letters of reference.
- Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning and explain how, based on these insights, they might contribute to the education of students in today's schools. On their résumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
- Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

- Maintain a B+ average (cumulative grade point average [CGPA] of 3.3) or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
- Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
- Regardless of the division to which applicants are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  - Complete the major in Sociology, which will fulfill the 6.0 FCEs required for Sociology as a first teaching subject.
  - Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    - Students should consult often with their HBA academic program supervisor to ensure they fulfill all the requirements of the CDP. Visit the Master of Teaching website for more information.
- Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | - HBA degree requirements.  
- In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
- By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | - The undergraduate degree will include:  
- the minor in Education and Society;  
- a minimum of 6.0 FCEs as part of the Sociology major requirements, which will also qualify as prerequisite courses in the first teaching subject; and  
- a second minor, which will also qualify as the minimum of 3.0 FCEs in the second teaching subject¹.  
- By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
- In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA and MT degree programs. |
| 5 and 6 | - Remaining courses from Year 1 and Year 2 of the MT program. | - 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Sociology (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Soc (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in Sociology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-sociology-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Soc (Maj) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Soc (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Sociology major program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:
• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Sociology, which fulfils the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
    ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
• In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
• By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the major in Socio-Cultural Anthropology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject.1  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

1 The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Sociology (Specialist), Honours Bachelor of Arts / Master of Teaching

UTSC Soc (Spec) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Specialist in Sociology / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

- early application to the MT program (in Year 3) and conditional admission to the MT program;
- eligibility for certification as a teacher in Ontario; and
- eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-sociology-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Soc (Spec) HBA / MT: Application Process

- Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
- Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Soc (Spec) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

- Be admitted to the HBA degree program and the Sociology specialist program.
- Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the specialist in Sociology, which fulfils the 6.0 FCEs required for Social Science-General as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4 | • HBA degree requirements.  
  • In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses.  
  • By the end of Year 4, fulfill both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
  o the specialist in Sociology, where the course requirements will fulfill the 6.0 FCEs required for the first teaching subject; and  
  o a minimum of 3.0 FCEs in the second teaching subject. ¹  
  • By the end of Year 3, complete at least half of the teaching subjects' prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
  • In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6 | • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
UTSC, Theatre and Performance (Major), Honours Bachelor of Arts / Master of Teaching

UTSC Thtr Per (Maj) HBA / MT: Introduction

Overview

The Combined Degree Program (CDP): UTSC, Honours Bachelor of Arts, Major in Theatre and Performance / Master of Teaching (MT) is designed for students interested in studying the intersections of science and education, coupled with professional teacher preparation.

Applicants to the MT program must have strong content knowledge in two teaching subjects taught in Ontario schools regardless of the division they are applying to (see the admission requirements below for details).

Students earn an honours bachelor’s degree from the University of Toronto Scarborough (UTSC) and an accredited professional Master of Teaching degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

• early application to the MT program (in Year 3) and conditional admission to the MT program;
• eligibility for certification as a teacher in Ontario; and
• eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.

For a general description of CDPs, see General Regulations section 1.4.3.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/major-program-theatre-and-performance-arts
Email: marcelle.defreitas@utoronto.ca (Marcelle DeFreitas, Combined Degree Programs Coordinator)

Master of Teaching Program
Ontario Institute for Studies in Education
Web: www.oise.utoronto.ca/mt
Email: mtinfo@utoronto.ca

UTSC Thtr Per (Maj) HBA / MT: Application Process

• Applicants must apply to the Honours Bachelor of Arts (HBA) program, the MT program, and the CDP.
• Qualified students in Year 3 of their HBA degree program apply to the MT program; those accepted will receive a conditional offer to start the MT program upon completion of their HBA program and degree requirements.

UTSC Thtr Perf (Maj) HBA / MT: Requirements

Minimum Admission Requirements

To be considered for conditional admission to the MT program and the CDP, applicants must meet the following admission requirements:

• Be admitted to the HBA degree program and the Theatre and Performance major program.
• Meet the admission requirements of the School of Graduate Studies and the MT program.
• Be enrolled full-time and in good standing in the HBA program:
  o Have a B+ average or higher in Year 2.
  o Carry a full course load of 5.0 full-course equivalents (FCEs) each year (i.e., complete a minimum of 5.0 FCEs over the three academic sessions [Fall, Winter, Summer]).
• Have completed at least half the teaching subjects’ prerequisite courses — i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science) by the end of Year 3.
• Provide at least two letters of reference.
• Provide a Statement of Intent indicating their preferred division (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. On their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
• Meet other qualifications as specified by the MT program (a police record check, relevant teaching experiences, academic and professional references, and satisfying teaching subject prerequisites).

To be given full, unconditional admission to the MT program, applicants must meet the following admission requirements:

• Maintain a B+ average or higher in their final year of study in the HBA program or over upper-level (C- and D-level) courses.
• Achieve at least a B+ average in the 1.0 graduate FCE taken in Year 4.
• Regardless of the division to which they are applying (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior), complete the prerequisites for both the first and second teaching subjects as follows:
  o Complete the major in Theatre and Performance, which fulfils the 6.0 FCEs required for Dramatic Arts as a first teaching subject.
  o Complete a second teaching subject consisting of 3.0 FCEs. However, if students are pursuing French or a science as their second teaching subject, 6.0 FCEs are required.
  ▪ Students should consult often with their HBA academic program supervisor to ensure they fulfil all the requirements of the CDP. Visit the Master of Teaching website for more information.
• Be conferred with the HBA degree.

Academic Path to Completion

Every CDP involves a specific combination of approved degree programs. The CDP requirements build on those of the two separate degree programs. Each CDP has a unique pattern of academic activity year by year.

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| 1 to 4| • HBA degree requirements.  
In Year 4, complete 1.0 full-course equivalent (FCE) in graduate courses. 
By the end of Year 4, fulfil both the undergraduate program requirements and undergraduate degree requirements. | • The undergraduate degree will include:  
o the major in Theatre and Performance, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; and  
o a minimum of 3.0 FCEs in the second teaching subject.¹  
• By the end of Year 3, complete at least half of the teaching subjects’ prerequisite courses—i.e., 3.0 FCEs in the first teaching subject and 1.5 FCEs in the second teaching subject (or 3.0 FCEs if the second teaching subject is French or a science).  
• In Year 4, students who receive a conditional offer of admission to the CDP must complete any two of the elective half courses recommended for CDP students. These courses (1.0 FCE) are counted towards the completion of both the HBA degree and MT degree programs. |
| 5 and 6| • Remaining courses from Year 1 and Year 2 of the MT program. | • 11.0 FCEs during Year 1 and Year 2 of the MT program. |

¹ The teaching subjects French (Second Language), Science-Biology, Science-Chemistry, Science-Physics, and Science-General require a minimum of 6.0 FCEs in university courses regardless of whether these teaching subjects are first or second subject specializations.

* The MT program has three divisions: Primary/Junior, Junior/Intermediate, and Intermediate/Senior. The specific requirements vary based on which division is selected. For details, see the MT calendar entry.
sgs.calendar.utoronto.ca