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.

CALENDAR 2021-2022

UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

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 *2021-222 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

M July 19	Registration for Fall session begins
M August 2	Civic Holiday (University closed)[1]
F August 27	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]
F September 3	Coursework must be completed and grades submitted for Summer session courses and extended courses[4]
M September 6	Labour Day (University closed)[1]
T September 7	Most formal graduate courses and seminars begin[5]
W September 8	Grades for all Summer session courses available for viewing by students on ACORN
F September 10	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]
W September 15	Final date to submit final doctoral theses to SGS to avoid fee charges for 2021-22[6]
M September 20	Final date to add full-year and Fall session courses
Th September 30	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.[3]
F October 1	Final date to submit final doctoral theses for Fall Convocation
F October 1	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 session[7]
M October 11	Thanksgiving Day (University closed)[1]
M October 25	Final date to drop Fall session courses without academic penalty[8]
November	Fall Convocation information and dates are posted at governingcouncil.utoronto.ca/convocation.
November	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.
T November 30	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.[3]
F December 17	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
T December 21	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 January[2][3]

W December 22	University closed for the winter break from Wednesday, December 23 to Friday, December 31 inclusive. For the last day of classes before the winter break, consult your graduate unit(s).[1]

2022 Winter Session

M January 3	University re-opens
M January 3 or 10	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.[5]
F January 7	Coursework must be completed and grades submitted for Fall session courses[4]
M January 10	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[2][3]
W January 12	Grades for Fall session courses available for viewing by students on ACORN
M January 17	Final date to submit doctoral theses without payment of incidental Winter session fees[9]
M January 17	Final date to add Winter session courses
F January 21	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[7]
F January 21	Final date for all students to request that their degrees be conferred *in absentia* in March
F January 21	Final date to submit final doctoral theses for March graduation *in absentia*[6]
F January 21	Students dually registered in the Fall session must be recommended for the master's degree by this date to maintain their PhD registration[7][10]
M January 24	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).[2]
M January 31	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.[3]
February	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.
S February 20	Final date to drop full-year and Winter session courses without academic penalty[8]
M February 21	Family Day (University closed)[1]
March	March graduation *in absentia* information is posted at governingcouncil.utoronto.ca/convocation
April	For the last day of Winter classes, consult your graduate unit(s)
Th April 14	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[7]
Th April 14	Final date for submission of final doctoral theses for students whose degrees are to be conferred at the June Convocation[6]
Th April 14	Students dually registered in the Winter session must be recommended for the master's degree by this date to maintain their PhD registration[7][10]
F April 15	Good Friday (University closed)[1]
Th April 21	For students obtaining degrees at June Convocation, coursework must be completed and grades submitted for full-year and Winter session courses
F April 22	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[2][3]

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

May	For the first day of Summer classes, consult your graduate unit(s)
F May 6	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]
M May 9	Final date to enrol in May-to-June or May-to-August session courses
F May 13	Coursework must be completed and grades submitted for full-year and Winter session courses (except for extended courses)[4]
W May 18	Winter session grades available for viewing by students on ACORN
M May 23	Victoria Day (University closed)[1]
F May 27	Final date to drop May-to-June F section courses without academic penalty[8]
T May 31	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]
June	June Convocation information and dates are posted at 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.

4	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.
5	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.
6	A final thesis is the corrected, approved version of the thesis which is submitted to SGS following the Final Oral Examination.
7	Graduate units may establish earlier deadlines for completing degree requirements. Students are advised to consult their own graduate unit for information.
8	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 & Refund Schedules for Graduate Studies on the Student Accounts website.
9	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.
10	Please refer to the SGS policy on Dual Registration under General Regulations section 6.1.13
11	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.

Programs by SGS Division

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, Francophonies 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

Symbol	Meaning
EFT	Extended full-time option
flex	Flexible-time program option available in addition to full-time program
p	Part-time option available in addition to full-time program
p~	Program only offered part-time

Graduate Unit	Program	Degrees
Aerospace Studies	Aerospace Science and Engineering	MASc, MEng^{EFT,p}, PhD^{flex}
Anthropology	Anthropology	MA^{p}, MSc^{p}, PhD
Applied Psychology and Human Development	Child Study and Education	MA, EdD
	Counselling and Clinical Psychology	MA, PhD
	Counselling Psychology	MEd^{p}, EdD^{p}
	Developmental Psychology and Education	MA, MEd^{p}, PhD^{flex}
	School and Clinical Child Psychology	MA, PhD
Architecture, Landscape, and Design	Architecture	MArch
	Architecture, Landscape, and Design	PhD
	Landscape Architecture	MLA
	Urban Design	MUD
	Visual Studies	MVS
Art History	Art History	MA^{p}, PhD
Astronomy and Astrophysics	Astronomy and Astrophysics	MSc, PhD
Biochemistry	Biochemistry	MSc, PhD
Biomedical Engineering	Biomedical Engineering	MASc, MEng^{EFT,p}, PhD
	Clinical Engineering	MHSc
Cell and Systems Biology	Cell and Systems Biology	MSc, PhD
Chemical Engineering and Applied Chemistry	Chemical Engineering and Applied Chemistry	MASc, MEng^{EFT,p}, PhD^{flex}
Chemistry	Chemistry	MSc, PhD
Cinema Studies	Cinema Studies	MA, PhD

Civil and Mineral Engineering	Cities Engineering and Management	MEngCEM[EFT]
	Civil Engineering	MASc, MEng[EFT, p], PhD
Classics	Classics	MA[p], PhD
Comparative Literature	Comparative Literature	MA, PhD
Computer Science	Applied Computing	MScAC
	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[flex]
	Language and Literacies Education	MA[p], MEd[p], PhD[flex]
	Teaching	MT
Dentistry	Dentistry	MSc[p], PhD
Drama, Theatre and Performance Studies	Drama, Theatre and Performance Studies	MA[p], PhD
Earth Sciences	Earth Sciences	MASc, 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	MASc, MEng[EFT, p], 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[EFT, p]
	Forestry	MScF, PhD
French Language and Literature	French Language and Literature	MA[p], PhD
Geography and Planning	Geography	MA[p], MSc[p], PhD
	Planning	MScPl[p], PhD
Germanic Languages and Literatures	Germanic Languages and Literatures	MA[p]
	Germanic Literature, Culture and Theory	PhD
Global Affairs and Public Policy	Global Affairs	MGA
	Public Policy	MPP
Health Policy, Management and Evaluation	Health Administration	MHSc
	Health Informatics	MHI
	Health Policy, Management and Evaluation	MSc[p], PhD[flex]
History	History	MA[p], PhD[flex]
History and Philosophy of Science and Technology	History and Philosophy of Science and Technology	MA[p], PhD[flex]

Immunology	Immunology	MSc, PhD
Industrial Relations and Human Resources	Industrial Relations and Human Resources	MIRHR[p], PhD
Information	Information	MI[p]
	Information Studies	PhD[flex]
	Museum Studies	MMSt
Italian Studies	Italian Studies	MA[p], PhD
Kinesiology	Kinesiology	MSc[p], PhD[flex]
	Professional Kinesiology	MPK
Laboratory Medicine and Pathobiology	Laboratory Medicine	MHSc
	Laboratory Medicine and Pathobiology	MSc, PhD
	Translational Research in the Health Sciences	MHSc
Law	Global Professional Law	GPLLM
	Law	LLM[p], MSL, SJD
Leadership, Higher and Adult Education	Adult Education and Community Development	MA[p], MEd[p], PhD[flex]
	Educational Leadership and Policy	MA[p], MEd[p], EdD[p], PhD[flex]
	Higher Education	MA[p], MEd[p], EdD[p], PhD[flex]
Linguistics	Linguistics	MA, PhD
Management & Innovation	Biotechnology	MBiotech
	Forensic Accounting	MFAcc
	Management & Professional Accounting	MMPA
	Management of Innovation	MMI
	Sustainability Management	MScSM
	Urban Innovation	MUI
Management, Rotman School of	Finance	MF[p]
	Financial Risk Management	MFRM
	Management	MBA[EFT]
	Management Analytics	MMA
Management, Tri-campus	Management	PhD
Management, University of Toronto Scarborough	Accounting and Finance	MAccFin
Materials Science and Engineering	Materials Science and Engineering	MASc, MEng[EFT, p], PhD[flex]
Mathematical Finance	Mathematical Finance	MMF[p]
Mathematics	Mathematics	MSc[p], PhD
Mechanical and Industrial Engineering	Mechanical and Industrial Engineering	MASc, MEng[EFT, p], PhD[flex]
Medical Biophysics	Medical Biophysics	MSc, PhD
Medical Science	Biomedical Communications	MScBMC
	Medical Science	MSc, PhD

Medieval Studies	Medieval Studies	MA[p], PhD
Molecular Genetics	Genetic Counselling	MSc
	Medical Genomics	MHSc
	Molecular Genetics	MSc, PhD
Music	Music	MA[p], PhD[flex]
	Music Performance	MMus, DMA
Near and Middle Eastern Civilizations	Near and Middle Eastern Civilizations	MA[p], PhD
Nursing Science	Nursing Science	MN, DN, PhD
Nutritional Sciences	Nutritional Sciences	MSc[p], PhD
Occupational Science and Occupational Therapy	Occupational Therapy	MScOT
Pharmaceutical Sciences	Pharmaceutical Sciences	MSc[p], PhD[flex]s
	Pharmacy	MScPhm
Pharmacology and Toxicology	Pharmacology	MSc[p], PhD
Philosophy	Philosophy	MA[p], PhD
Physical and Environmental Sciences	Environmental Science	MEnvSc[p], PhD
Physical Therapy	Physical Therapy	MScPT
Physics	Physics	MSc, PhD
Physiology	Medical Physiology	MHSc
	Physiology	MSc, PhD
Political Science	Political Science	MA[p], PhD
Psychological Clinical Science	Counselling and Clinical Psychology	MA, PhD
Psychology	Psychology	MA, PhD
Public Health Sciences	Bioethics	MHSc
	Community Health	MScCH[p]
	Public Health Sciences	MPH[p], MSc[p], DrPH, PhD[flex]
Rehabilitation Sciences	Rehabilitation Science	MSc[p], PhD
	Speech-Language Pathology	MSc, PhD
Religion	Religion	MA[p], PhD
Slavic Languages and Literatures	Slavic Languages and Literatures	MA, PhD
Social Justice Education	Social Justice Education	MA[p], MEd[p], EdD[p], PhD[flex]
Social Work	Social Work	MSW[p], PhD
Sociology	Sociology	MA[p], PhD
Spanish	Spanish	MA[p], PhD
Speech-Language Pathology	Speech-Language Pathology	MHSc
Statistical Sciences	Financial Insurance	MFI
	Statistics	MSc[p], PhD
Women and Gender Studies	Women and Gender Studies	MA, PhD

Combined Degree Programs

Undergraduate / Master's Degree Programs

Degrees in the Combination	Combined Degree Program
BASc / MBA	STG, The Jeffrey Skoll Combined Bachelor of Applied Science in Engineering / Management, Master of Business Administration
BBA / MAccFin	UTSC, Bachelor of Business Administration, Specialist in Management and Accounting / Master of Accounting and Finance
BBA / MAccFin	UTSC, Bachelor of Business Administration, Specialist Co-op in Management and Accounting / Master of Accounting and Finance
BKin / MT	STG, Bachelor of Kinesiology / Master of Teaching
HBA / MA	STG, Honours Bachelor of Arts, Minor in Education and Society / Child Study and Education, Master of Arts
HBA / MScSM	UTM, Honours Bachelor of Arts, Major in Environmental Management / Master of Science in Sustainability Management
HBA / MScSM	UTM, Honours Bachelor of Arts, Specialist in Environmental Management / Master of Science in Sustainability Management
HBA / MT	STG, Honours Bachelor of Arts, Major in English / Master of Teaching
HBA / MT	STG, Honours Bachelor of Arts, Major in History / Master of Teaching
HBA / MT	STG, Honours Bachelor of Arts, Major in Sociology / Master of Teaching
HBA / MT	UTM, Honours Bachelor of Arts, Major in French Studies / Master of Teaching
HBA / MT	UTM, Honours Bachelor of Arts, Major in Language Teaching and Learning: French / Master of Teaching
HBA / MT	UTM, Honours Bachelor of Arts, Specialist in French Studies / Master of Teaching
HBA / MT	UTM, Honours Bachelor of Arts, Specialist in Language Teaching and Learning: French and Italian /
HBA / MT	UTSC, Honours Bachelor of Arts, Major in English / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major Co-op in English / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major in French / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major Co-op in French / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major in History / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major in Human Geography / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major in Socio-Cultural Anthropology / Master of Teaching

HBA / MT	UTSC, Honours Bachelor of Arts, Major in Sociology / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Major in Theatre and Performance / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in English / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist Co-op in English / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in French / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist Co-op in French / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in History / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in Human Geography / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in Socio-Cultural Anthropology / Master of Teaching
HBA / MT	UTSC, Honours Bachelor of Arts, Specialist in Sociology / Master of Teaching
HBSc / MA	STG, Honours Bachelor of Science, Minor in Education and Society / Child Study and Education, Master of Arts
HBSc / MA	UTM, Honours Bachelor of Science, Major in Psychology / Child Study and Education, Master of Arts
HBSc / MA	UTM, Honours Bachelor of Science, Specialist in Exceptionality in Human Learning / Child Study and Education, Master of Arts
HBSc / MA	UTM, Honours Bachelor of Science, Specialist in Psychology / Child Study and Education, Master of Arts
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MA	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Chemical Engineering and Applied Chemistry, Master of Engineering

HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Chemical Engineering and Applied Chemistry, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Civil Engineering, Master of Engineering
HBSc / MEng	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Civil Engineering, Master of Engineering
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Conservation and Biodiversity / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Environmental Geoscience / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Geoscience / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Master of Environmental Science
HBSc / MEnvSc	UTSC, Honours Bachelor of Science, Specialist in Integrative Biology / Master of Environmental Science
HBSc / MScSM	UTM, Honours Bachelor of Science, Major in Environmental Science / Master of Science in Sustainability Management
HBSc / MScSM	UTM, Honours Bachelor of Science, Specialist in Environmental Science / Master of Science in Sustainability Management
HBSc / MSW	UTSC, Honours Bachelor of Science, Specialist in Mental Health Studies / Master of Social Work
HBSc / MSW	UTSC, Honours Bachelor of Science, Specialist Co-op in Mental Health Studies / Master of Social Work
HBSc / MT	STG, Honours Bachelor of Science, Major in Mathematics / Master of Teaching
HBSc / MT	STG, Honours Bachelor of Science, Major in Psychology / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Major in Biology / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Major in Biology for Health Sciences / Master of Teaching

HBSc / MT	UTM, Honours Bachelor of Science, Major in Chemistry / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Major in Mathematical Sciences / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Major in Physics / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Astronomical Sciences / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Biological Chemistry / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Biology / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Chemistry / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Comparative Physiology / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Ecology and Evolution / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Forensic Biology / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Forensic Chemistry / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Mathematical Sciences / Master of Teaching
HBSc / MT	UTM, Honours Bachelor of Science, Specialist in Molecular Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Biochemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major Co-op in Biochemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major Co-op in Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Conservation and Biodiversity / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Evolutionary Anthropology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Human Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Mathematics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major Co-op in Mathematics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Molecular Biology, Immunology and Disease / Master of Teaching

HBSc / MT	UTSC, Honours Bachelor of Science, Major in Physics and Astrophysics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Major in Plant Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Biological Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Biological Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Conservation and Biodiversity / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Environmental Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Evolutionary Anthropology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Human Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Integrative Biology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Mathematics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Mathematics / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Molecular Biology and Biotechnology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist Co-op in Molecular Biology and Biotechnology / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Physical and Mathematical Sciences / Master of Teaching
HBSc / MT	UTSC, Honours Bachelor of Science, Specialist in Physics and Astrophysics / Master of Teaching
MusBac / MT	STG, Bachelor of Music, Music, Stream in Music Education / Master of Teaching

Second-Entry Undergraduate / Master's Degree Programs

Degrees in the Combination	Combined Degree Program
JD / MA	STG, Law, Juris Doctor / Criminology and Sociolegal Studies, Master of Arts
JD / MA	STG, Law, Juris Doctor / Economics, Master of Arts
JD / MA	STG, Law, Juris Doctor / English, Master of Arts
JD / MA	STG, Law, Juris Doctor / European and Russian Affairs, Master of Arts
JD / MA	STG, Law, Juris Doctor / Management, Master of Business Administration
JD / MGA	STG, Law, Juris Doctor / Master of Global Affairs
JD / MI	STG, Law, Juris Doctor / Master of Information
JD / MPP	STG, Law, Juris Doctor / Master of Public Policy
JD / MSW	STG, Law, Juris Doctor / Master of Social Work
MD / MBA	STG, Medicine, Doctor of / Management, Master of Business Administration
PharmD / MBA	STG, Pharmacy, Doctor of / Management, Master of Business Administration

Second-Entry Undergraduate / Doctoral Degree Programs

Degrees in the Combination	Combined Degree Program
JD / PhD	STG, Law, Juris Doctor /Criminology and Sociolegal Studies, Doctor of Philosophy
JD / PhD	STG, Law, Juris Doctor /Economics, Doctor of Philosophy
JD / PhD	STG, Law, Juris Doctor /Philosophy, Doctor of Philosophy
JD / PhD	STG, Law, Juris Doctor /Political Science, Doctor of Philosophy
MD / PhD	STG, Medicine, Doctor of /Doctor of Philosophy

Master's / Master's Degree Programs

Degrees in the Combination	Combined Degree Program
MBA / MGA	STG, Management, Master of Business Administration / Master of Global Affairs
MHSc / 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

Graduate Unit	Program Name	Degrees
Applied Psychology and Human Development	Master of Education (University of Toronto) / Master of Medicine (China Medical University)	MEd / MMed
Global Affairs and Public Policy	Master of Global Affairs (University of Toronto) / Master of International Affairs (Hertie School of Governance)	MGA / MIA
	Master of Global Affairs (University of Toronto) / Master of Public Administration (London School of Economics)	MGA / MPA
	Master of Global Affairs (University of Toronto) / Master of Public Policy (Sciences Po)	MGA / MPP
Law	Bachelor of Laws (National University of Singapore) / Master of Laws (University of Toronto)	LLB / LLM
	Bachelor of Laws (Tsinghua University) / Master of Laws (University of Toronto)	LLB / LLM
	Master of Laws (University of Toronto) / Juris Master (Tsinghua University)	LLM / JM
	Master of Laws (University of Toronto) / Master of Laws (Tsinghua University)	LLM / LLM
Management, Rotman School of Management	Global Executive Master of Business Administration (University of Toronto / Bocconi University)	MBA / MBA
Mechanical and Industrial Engineering	Bachelor of Engineering (South China University of Technology) / Master of Engineering (University of Toronto)	BEng / MEng

Collaborative Specializations

Collaborative Specialization	Participating Degree Programs	Degrees
Addiction Studies	Community Health Counselling and Clinical Psychology Criminology and Sociolegal Studies Medical Science Nursing Science Pharmaceutical Sciences Pharmacology Psychology Public Health Sciences Social Work Sociology	MScCH MA, PhD MA, PhD MSc, PhD PhD MSc, PhD MSc, PhD MA, PhD MPH, MSc, PhD MSW, PhD MA, PhD
Aging, Palliative and Supportive Care Across the Life Course	Adult Education and Community Development Anthropology Counselling and Clinical Psychology Counselling Psychology Dentistry Health Administration Health Policy, Management and Evaluation Information Medical Science Music Nursing Science Pharmaceutical Sciences Psychology Public Health Sciences Rehabilitation Science Social Work Sociology	MA, MEd, PhD MA, MSc, PhD MA, PhD MEd, EdD MSc, PhD MHSc MSc, PhD MI, PhD MSc, PhD MA, PhD MN, PhD MSc, PhD MA, PhD MPH, MSc, PhD MSc, PhD MSW, PhD MA, PhD

	Speech-Language Pathology Women and Gender Studies	MSc, PhD MA
Ancient and Medieval Philosophy	Classics Medieval Studies Philosophy	PhD PhD PhD
Bioethics	Health Administration Health Policy, Management and Evaluation Law Medical Science Nursing Science Pharmaceutical Sciences Philosophy Public Health Sciences Rehabilitation Science Religion Social Work Women and Gender Studies	MHSc MSc, PhD LLM, SJD MSc, PhD MN, PhD MSc, PhD MA, PhD MPH, MSc, PhD MSc, PhD MA, PhD PhD MA
Biomedical Engineering	Biochemistry Biomedical Engineering Chemical Engineering and Applied Chemistry Chemistry Dentistry Electrical and Computer Engineering Laboratory Medicine and Pathobiology Materials Science and Engineering Mechanical and Industrial Engineering Medical Biophysics Medical Science Pharmaceutical Sciences Physics Physiology Rehabilitation Science	MSc, PhD MASc, PhD MASc, PhD MSc, PhD MSc, PhD MASc, PhD MSc, PhD MASc, PhD MASc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD
Book History and Print Culture	Art History Classics Comparative Literature English French Language and Literature Germanic Languages and Literatures Germanic Literature, Culture and Theory History History and Philosophy of Science and Technology Information Italian Studies Medieval Studies Museum Studies Music Religion Spanish	MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA PhD MA, PhD MA, PhD MI, PhD MA, PhD MA, PhD MMSt MA, PhD MA, PhD MA, PhD
Cardiovascular Sciences	Biomedical Engineering Chemical Engineering and Applied Chemistry Clinical Engineering Dentistry Kinesiology Laboratory Medicine and Pathobiology Medical Biophysics Medical Science Pharmaceutical Sciences Pharmacology Physiology Rehabilitation Science	MASc, PhD MASc, PhD MHSc MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD
Community Development	Adult Education and Community Development Counselling and Clinical Psychology (field: Counselling and Psychotherapy)	MA, MEd MA

	Counselling Psychology Geography Planning Public Health Sciences Social Work	MEd MA MScPl MPH MSW
Comparative, International and Development Education	Adult Education and Community Development Curriculum and Pedagogy Educational Leadership and Policy Higher Education Language and Literacies Education Social Justice Education	MA, MEd, PhD MA, MEd, PhD MA, MEd, EdD, PhD MA, MEd, EdD, PhD MA, MEd, PhD MA, MEd, EdD, PhD
Contemporary East and Southeast Asian Studies	Anthropology East Asian Studies Geography Global Affairs History Management Planning Political Science Public Policy Social Work Sociology Women and Gender Studies	MA MA MA MGA MA MBA MScPl MA MPP MSW MA MA
Developmental Biology	Biochemistry Biomedical Engineering Cell and Systems Biology Clinical Engineering Immunology Laboratory Medicine and Pathobiology Medical Science Molecular Genetics Physiology	MSc, PhD MASc, PhD MSc, PhD MHSc MSc, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD
Development Policy and Power	Anthropology Environmental Science Geography Political Science Public Health Social Justice Education Sociology Women and Gender Studies	MSc, PhD MEnvSc MA MA MPH MA, MEd MA MA
Diaspora and Transnational Studies	Anthropology Art History Cinema Studies Comparative Literature Criminology and Sociolegal Studies Drama, Theatre and Performance Studies English Geography Germanic Languages and Literature Germanic Literature, Culture and Theory History Near and Middle Eastern Civilizations Political Science Religion Slavic Languages and Literatures Social Justice Education Sociology Spanish Women and Gender Studies	MA, MSc, PhD MA, PhD MA MA, PhD MA, PhD MA, PhD MA, PhD MA, MSc, PhD MA PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, PhD MA, MEd, EdD, PhD MA, PhD MA, PhD MA, PhD
Editing Ancient and Medieval Texts	Classics English History Italian Studies	PhD PhD PhD PhD

	Medieval Studies Music Philosophy Religion Spanish	PhD PhD PhD PhD PhD
Education, Francophonies and Diversity	Curriculum and Pedagogy Language and Literacies Education Social Justice Education	MA, MEd, PhD MA, MEd, PhD MA, MEd, EdD, PhD
Educational Policy	Adult Education and Community Development Curriculum and Pedagogy Developmental Psychology and Education Educational Leadership and Policy Higher Education Language and Literacies Education Social Justice Education	MA, MEd, PhD MA, MEd, PhD MA, MEd, PhD MA, MEd, EdD, PhD MA, MEd, EdD, PhD MA, MEd, PhD MA, MEd, EdD, PhD
Engineering Education	Chemical Engineering and Applied Chemistry Civil Engineering Curriculum and Pedagogy Mechanical and Industrial Engineering	MASc, PhD MASc, PhD MA, PhD MASc, PhD
Environment and Health	Adult Education and Community Development Chemical Engineering and Applied Chemistry Community Health Environmental Science Forest Conservation Forestry Geography Landscape Architecture Medical Science Music Planning Public Health Sciences Women and Gender Studies	MA, MEd, PhD MASc, PhD MScCH MEnvSc, PhD MFC MScF, PhD MA, MSc, PhD MLA MSc, PhD MA, MMus, PhD MScPl, PhD MPH, PhD MA, PhD
Environmental Studies	Adult Education and Community Development Anthropology Chemical Engineering and Applied Chemistry Chemistry Civil Engineering Earth Sciences Environmental Science Ecology and Evolutionary Biology Forest Conservation Forestry Geography Global Affairs Information Landscape Architecture Management Music Physics Planning Political Science Public Policy Religion Social Justice Education Sociology Sustainability Management Women and Gender Studies	MA, MEd, PhD MA, MSc, PhD MASc, MEng, PhD MSc, PhD MASc, MEng, MEngCEM, PhD MSc, PhD MEnvSc, PhD PhD MFC MScF, PhD MA, MSc, PhD MGA MI, PhD MLA MBA, PhD MA, PhD MSc, PhD MScPl, PhD MA, PhD MPP MA, PhD MA, MEd, EdD, PhD MA, PhD MScSM MA, PhD
Ethnic, Immigration and Pluralism Studies	Anthropology Educational Leadership and Policy European and Russian Affairs Geography Global Affairs History	MA, PhD MA, MEd, EdD, PhD MA MA, PhD MGA MA, PhD

	Industrial Relations and Human Resources Language and Literacies Education Political Science Public Policy Religion Social Justice Education Social Work Sociology Women and Gender Studies	MIRHR, PhD MA, MEd, PhD MA, PhD MPP MA, PhD MA, MEd, EdD, PhD MSW, PhD MA, PhD MA, PhD
Food Studies	Anthropology East Asian Studies Environmental Science Geography and Planning History Information Museum Studies Nutritional Sciences Public Health Sciences Sociology	MA, PhD MA, PhD MA, PhD MA, MSc, PhD MA, PhD MI MMSt MSc, PhD PhD MA, PhD
Genome Biology and Bioinformatics	Biochemistry Biomedical Engineering Cell and Systems Biology Chemical Engineering and Applied Chemistry Computer Science Ecology and Evolutionary Biology Laboratory Medicine and Pathobiology Medical Biophysics Medical Science Molecular Genetics	PhD PhD PhD PhD PhD PhD PhD PhD PhD PhD
Global Health (U of T Global Scholar)	Anthropology Chemical Engineering and Applied Chemistry Community Health Dentistry Geography Health Policy, Management and Evaluation Law Management Medical Science Nursing Science Pharmaceutical Sciences Planning Political Science Public Health Sciences Rehabilitation Science	MA, MSc, PhD MASc, MEng, PhD MScCH MSc (thesis only), PhD MA, MSc, PhD MSc (thesis only), PhD LLM, SJD PhD PhD PhD MSc (thesis only), PhD MScPl, PhD PhD MPH, MSc (thesis only), PhD MSc, PhD
Health Care, Technology, and Place (admissions have closed)	Biomedical Engineering English Health Policy, Management and Evaluation Mechanical and Industrial Engineering Medical Science Pharmaceutical Sciences Public Health Sciences Rehabilitation Science Social Work	PhD PhD PhD PhD PhD PhD PhD PhD PhD
Health Services and Policy Research	Health Policy, Management and Evaluation Kinesiology Pharmaceutical Sciences Public Health Sciences Rehabilitation Science Social Work	MSc, PhD MSc, PhD MSc, PhD PhD MSc PhD
Indigenous Health	Adult Education and Community Development Anthropology Counselling and Clinical Psychology Counselling Psychology	MA, MEd, PhD MA, MSc, PhD MA, PhD 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
Jewish Studies	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
Knowledge Media Design	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
Mediterranean Archaeology	Anthropology	PhD
	Art History	PhD
	Classics	PhD
	Near and Middle Eastern Civilizations	PhD
	Religion	PhD
Musculoskeletal Sciences	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
Neuroscience	Biochemistry	MSc, PhD
	Bioethics	MHSc
	Biomedical Engineering	MASc, PhD
	Cell and Systems Biology	MSc, PhD
	Clinical Engineering	MHSc
	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
Next-Generation Precision Medicine	Chemistry	PhD
	Chemical Engineering and Applied Chemistry	PhD
	Molecular Genetics	PhD
	Pharmaceutical Sciences	PhD
Psychology and Engineering	Mechanical and Industrial Engineering	MASc, PhD
	Psychology	MA, PhD
Public Health Policy	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
Resuscitation Sciences (admissions have been suspended)	Biomedical Engineering	PhD
	Clinical Engineering	MHSc
	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
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
	Physiology	MSc, PhD
	Public Health Sciences	MPH, MSc, PhD
	Rehabilitation Science	MSc, PhD
Sexual Diversity Studies	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 Psychology	MEd, EdD
	Counselling and Clinical Psychology	MA, PhD
	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
	Visual Studies	MVS
	Women and Gender Studies	MA, PhD
South Asian Studies	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
Toxicology	Laboratory Medicine and Pathobiology	MSc, PhD
	Medical Science	MSc, PhD
	Nutritional Sciences	MSc, PhD
	Pharmaceutical Sciences	MSc, PhD
	Pharmacology	MSc, PhD
Women and Gender Studies	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	MScPl, 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

Women's Health	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	MA, PhD MSc, PhD MA, PhD MSc, PhD MSc, PhD MSc, PhD MSc, PhD MN, PhD MSc, PhD MScOT MSc, PhD MA, PhD MPH, PhD MSc, PhD MA, PhD MSW, PhD MA, PhD
Workplace Learning and Social Change	Adult Education and Community Development Industrial Relations and Human Resources Rehabilitation Science Social Justice Education Women and Gender Studies	MA, MEd, PhD MIRHR, PhD MSc, PhD MA, MEd, EdD, PhD MA

Diploma Programs

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

Legend

Symbol	Meaning
p	Part-time option available in addition to full-time program
p~	Program only offered part-time

Graduate Unit	Program Name	Diploma
Information	Advanced Study in Information Studies	GDipISt^{p}
Management	Professional Accounting	GDipPA
Management & Innovation	Investigative and Forensic Accounting (admissions suspended)	DIFA$^{p\sim}$
Medical Science	Graduate Diploma in Health Research	GDipHR$^{p\sim}$
Nursing Science	Post-Master's Nurse Practitioner	DipNP^{p} (PMNP)
Social Work	Advanced Diploma in Social Service Administration (admissions closed)	DSSA^{p}

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.

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 Organization of the School of Graduate Studies

The School of Graduate Studies (SGS) is responsible for the oversight of all graduate programs in the University of Toronto and for developing and implementing appropriate regulations and operating procedures for admissions, programs of study, and completion of degree requirements.

According to its constitution, the School of Graduate Studies has a council and is organized into four divisions. Each of the departments, centres, institutes, schools, and Faculties (referred to generally as "graduate units") belongs to one of the divisions.

1.1 The Divisions

- Division I — Humanities
- Division II — Social Sciences
- Division III — Physical Sciences
- Division IV — Life Sciences

1.2 Graduate Education Council

The Graduate Education Council is an academic advisory and regulatory body. It exercises powers and duties, subject to the approval of Governing Council, as required, under the provisions of the University of Toronto Act. The Graduate Education Council consists of 35 elected members and numerous ex-officio members. Each division elects five faculty members and three graduate students to the council; a senior representative of the Graduate Students' Union is a voting member. There are three administrative staff seats. The Graduate Education Council is chaired by the Dean of Graduate Studies and Vice-Provost, Graduate Research and Education.

The Graduate Education Council is primarily responsible for determining policies and regulations affecting the administration and operation of graduate studies, and for advising Governing Council on initiatives in graduate studies. The Graduate Education Council is concerned with the quality of graduate education across the University.

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 fulfil 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 accord 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.

TOEFL Minimum Score Requirements

Consult the graduate unit to which you are applying to determine if a higher minimum score is required.

Academic Division	Internet-Based Test (TOEFL iBT) Including Writing and Speaking Sections	Paper-Based Test (TOEFL PBT) and TWE
I. Humanities	Overall score: 93 Writing: 22 Speaking: 22	Overall score: 580 TWE: 5
II. Social Sciences	Overall score: 93 Writing: 22 Speaking: 22	Overall score: 580 TWE: 5
III. Physical Sciences	Overall score: 93 Writing: 22 Speaking: 22	Overall score: 580 TWE: 4
IV. Life Sciences	Overall score: 93 Writing: 22 Speaking: 22	Overall score: 580 TWE: 5

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:

Doctoral	6 years
Direct-entry doctoral	7 years
Flexible-time PhD program option	6 to 8 years (depending on program)
Professional doctoral	5 to 6 years (depending on program)
Full-time master's	3 years (except for the MArch: 4 years; Dentistry MSc: 3 to 5 years)
Part-time master's	6 years
Combined degree programs	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.

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.

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:

Sept. 20, 2021	Final date to add full-year and Fall session courses.
Oct. 25, 2021	Final date to drop Fall session courses without academic penalty.
Jan. 17, 2022	Final date to add Winter session courses.
Feb. 14, 2022	Final date to drop full-year and Winter session courses without academic penalty.
May 9, 2022	Final date to enrol in May-to-June or May-to-August session courses.
May 27, 2022	Final date to drop May-to-June F section courses without academic penalty.

June 13, 2022	Final date to drop May-to-August session Y section courses without academic penalty.
July 4, 2022	Final date to enrol in July-to-August courses.
July 18, 2022	Final date to drop a July-to-August S section courses without academic penalty.

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:

May 13, 2022	Fall session (Y, H) courses
Sept. 2, 2022	Fall/Winter session (Y) and Winter session (Y, H) courses
Jan. 7, 2023	Summer session courses and extended courses

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:

1. Transfer Credit: Course Equivalent Credit received for course completed in a prior program is considered to be equivalent to course offered by the graduate unit, thus reducing the overall course credit requirements for degree.
2. Transfer Credit: General Equivalent Unassigned credit for course not identifiable with course offerings but which is evaluated as being appropriate for academic credit on transfer, thus reducing overall course credit requirements for degree.
3. Course Exemption: The graduate unit may exempt a student from a specific course requirement permitting the substitution of another course to meet degree requirements. Overall course credit requirements for degree are not reduced.

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 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.

Doctoral Degree Program Categories	Time Limit to Achieve Candidacy
Doctoral, four-year program	by end of Year 3
Doctoral, five-year program (direct-entry)	by end of Year 4
Flexible-time PhD program option	by end of Year 4
Professional doctoral program, full-time	by end of Year 3
Professional doctoral program, part-time	by end of Year 4

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.

Unless the graduate unit has specified earlier deadlines, supervisory committees should be established no later than the end of the fourth session in all doctoral programs, except in five-year (direct-entry) doctoral programs, flexible-time PhD program options, and part-time professional doctoral programs, where the supervisory committee should be established no later than the end of the seventh session (see chart below).

Doctoral Degree Program Categories	Time Limit for Constituting Supervisory Committee
Doctoral, four-year program	by end of first session in Year 2
Doctoral, five-year program (direct-entry)	by end of first session in Year 3
Flexible-time PhD program option	by end of first session in Year 2
Professional doctoral program, full-time	by end of first session in Year 2
Professional doctoral program, part-time	by end of first session in Year 3

The student's choice of supervisor and supervisory committee is subject to the approval of the graduate unit in which the student is registered. A student who encounters difficulties setting up a supervisory committee should consult the chair, director, or graduate coordinator of the graduate unit in advance of the relevant deadline.

A student who fails to constitute a supervisory committee by the required time may lose good academic standing.

A student is expected to meet with this committee at least once a year, and more often if the committee so requires. At each meeting, the supervisory committee will assess the student's progress in the program and provide advice on future work. In each of two consecutive meetings, if a student's supervisory committee reports that the student's progress is unsatisfactory, the graduate unit may recommend to the School of Graduate Studies the termination of registration and eligibility of that student.

A student who encounters difficulties arranging a meeting of this committee should consult the chair, director, or graduate coordinator of the graduate unit in advance of the relevant deadline for doing so.

A student who, through their own neglect, fails to meet with the supervisory committee in a given year will be considered to have received an unsatisfactory progress report from the committee.

See also General Regulations, section 8 Thesis and Graduate Student Supervision; Degree Regulations, section 12 Doctoral Degrees; and specific program requirements in the Programs by Graduate Unit section.

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 fulfil 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 convenor. The convenor 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 convenor. If all members of the subcommittee approve the completed modification, the candidate will be passed without the necessity of reconvening the examination committee. The convenor 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		
Timeline for Student Action at Each Stage **See Note A below**	Step **See Note B below**	Timeline for Decision/Action by University Body at Each Stage **See Note C below**
	1. Informal a. Student to instructor b. Student to graduate coordinator/chair/dean	
8 weeks from date of decision being appealed	**2. Graduate-Unit-Level Appeal** Notice of Appeal to GDAAC[1] **Note:** 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[2]; see Step 3b below.	**8 weeks** from filing of Notice of Appeal to GDAAC[1]
a. **8 weeks** from decision of graduate unit chair/dean b. **8 weeks** from written notification of failure of the Final Doctoral Oral Examination or termination of registration in a graduate program	**3. SGS Appeal** a. Notice of Appeal to GAAB[2] 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.	**8 weeks** from filing of Notice of Appeal to GAAB[2]
90 days from decision of GAAB2	**4. Governing Council Appeal** Notice of Appeal to GCAAC[3]	N/A

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.

Note C: The chair of the appeal body retains discretion to extend time limits applicable to its response at any stage where, in its view, compelling reasons exist.

[1] Graduate Department Academic Appeals Committee
[2] Graduate Academic Appeals Board
[3] Governing Council Academic Appeals Committee

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.

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.

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*.

11.14 Statement on Human Rights

Acknowledging its fundamental and distinctive commitment to freedom of thought, inquiry, and expression, the University of Toronto affirms its commitment to the values of equal opportunity, equity, and social justice.

See the full text of the *Statement on Human Rights*.

11.15 University-Mandated Leave of Absence Policy

The University is committed to providing students with the opportunity to pursue their educational goals. It is also committed to maintaining a safe environment for study and work. Pursuant to the University's commitment to providing supports and accommodations for students and its obligation under the *Ontario Human Rights Code*, the University provides accommodative resources through a number of services, each involving specialized attention by experienced and qualified staff to the specific needs of students.

In most circumstances, these resources, combined with the engagement and cooperation of the student, will allow a student to obtain their educational goals. However, on a small number of occasions, this approach may not be successful, or a student, for whatever reason, may not engage with the supportive resources, and the result may be an impact on the health and safety of the student or others, or on the ability of the student to engage in the essential elements of the educational activity. In these infrequent circumstances, the potential application of the *Code of Student Conduct* will not be suitable, since it entails a disciplinary approach. Similarly, it may not be consistent with the duty to accommodate to merely let the student confront significant negative academic consequences in these situations. This Policy, therefore, sets out additional options to better reflect the needs and the situation of the student.

This Policy will be applied in a manner that fully complies with the *Ontario Human Rights Code* including (where applicable) the duty to provide reasonable accommodation to the point of undue hardship.

See the full text of the *University-Mandated Leave of Absence Policy*.

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 6.1.11.2 Extension of Time for Completion of Degree Requirements, Doctoral Students.

PhD students who have not completed the degree requirements before the time limit for the degree or by the end of the approved extension period may not enrol further.

For flexible-time PhD program option, see section 12.1.1.3 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. 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.

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 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. 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

- Leadership, Higher and Adult Education
- Social Justice Education

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.

Degree Name	Degree Abbreviation	Graduate Unit
Global Professional Master of Laws	GPLLM	Law
Master of Architecture	MArch	Architecture, Landscape, and Design
Master of Biotechnology	MBiotech	Management & Innovation
Master of Business Administration	MBA	Management, Rotman School of
Master of Engineering in Cities Engineering and Management	MEngCEM	Civil and Mineral Engineering
Master of Environmental Science	MEnvSc	Physical and Environmental Sciences

Master of Environment and Sustainability	MES	Environment
Master of Finance	MF	Management, Rotman School of
Master of Financial Economics	MFE	Financial Economics
Master of Financial Insurance	MFI	Statistical Sciences
Master of Financial Risk Management	MFRM	Management, Rotman School of
Master of Forensic Accounting	MFAcc	Management & Innovation
Master of Forest Conservation	MFC	Forestry
Master of Global Affairs	MGA	Global Affairs and Public Policy
Master of Health Informatics	MHI	Health Policy, Management and Evaluation
Master of Industrial Relations and Human Resources	MIRHR	Industrial Relations and Human Resources
Master of Information	MI	Information
Master of Landscape Architecture	MLA	Architecture, Landscape, and Design
Master of Laws	LLM	Law
Master of Management and Professional Accounting	MMPA	Management & Innovation
Master of Management of Innovation	MMI	Management & Innovation
Master of Mathematical Finance	MMF	Mathematical Finance
Master of Museum Studies	MMSt	Information
Master of Music	MMus	Music
Master of Nursing	MN	Nursing Science
Master of Professional Kinesiology	MPK	Kinesiology
Master of Public Health	MPH	Public Health Sciences
Master of Public Policy	MPP	Global Affairs and Public Policy
Master of Science in Applied Computing	MScAC	Computer Science
Master of Science in Biomedical Communications	MScBMC	Medical Science
Master of Science in Community Health	MScCH	Public Health Sciences
Master of Science in Forestry	MScF	Forestry
Master of Science in Occupational Therapy	MScOT	Occupational Science and Occupational Therapy
Master of Science in Pharmacy	MScPhm	Pharmaceutical Sciences
Master of Science in Physical Therapy	MScPT	Physical Therapy
Master of Science in Planning	MScPl	Geography and Planning
Master of Science in Sustainability Management	MScSM	Management & Innovation
Master of Social Work	MSW	Social Work
Master of Studies in Law	MSL	Law
Master of Teaching	MT	Curriculum, Teaching and Learning
Master of Urban Design	MUD	Architecture, Landscape, and Design
Master of Urban Innovation	MUI	Management & Innovation
Master of Visual Studies	MVS	Architecture, Landscape, and Design

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.

See also: Minimum Degree Fee above; and General Regulations section 6.1.11 Extension of Time for Completion of Degree Requirements.

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.

Degree and Diploma Programs by Graduate Unit

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, MSc, 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 - DipIng, MSc, PhD, PhD
Steeves, 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 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 three sessions (one year).
- 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 minimum of half the courses must be offered at UTIAS.
  - 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 minimum of half the courses must be offered at UTIAS.
  - A maximum of three 500-level courses (1.5 FCEs) is permitted.

- A maximum of two half courses (1.0 FCE) may be taken in any session.
- A maximum of four half courses (2.0 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 nine sessions (three 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

9 sessions

Time Limit

6 years

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

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

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
    - 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 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.
- 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

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

AER521H, AER 1415H,
CHE575H, CHE1134H, CHE1475H,
MIE506H, 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: 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 list or other related courses approved by professors; and
- one MEng **project course** related to unmanned aerial vehicles.

Elective Courses

AER501H, AER503H, AER506H, AER510H, AER521H, AER525H, AER1202H, AER1211H, AER1214H, AER1215H, AER1303H, AER1308H, AER1316H, AER1324H, AER1403H, AER1410H, AER1415H, AER1503H, AER1513H, AER1514H, CSC411H, CSC2503H, CSC2545H,
ECE537H, ECE1512H, ECE1505H, ECE1747H, ECE1762H, MIE506H, MIE1068H, MIE1740H, MIE1742H, MIE1809H, ROB521H, ROB1514H.

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, 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.

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

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

AER506H, AER1503H, AER1512H,
JEB1444H,
MIE1001H.

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: Sustainable Aviation (MASc, MEng, PhD)

MASc and PhD students must successfully complete:

- At least **two half courses (1.0 full-course equivalent [FCE])** from: AER1303H, AER1304H, AER1306H, AER1308H, AER1310H, AER1316H, AER1318H, AER1319H, AER1322H, AER1403H, AER1418H, AER501H, AER510H, CIV1307H, PHY1498H, PHY2504H, PHY2505H, CHE1123H, JCC1313H.
- 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:

- At least **four half courses (2.0 FCEs)** from: AER1303H, AER1304H, AER1306H, AER1308H, AER1310H, AER1316H, AER1318H, AER1319H, AER1322H, AER1403H, AER1418H, AER501H, AER510H, CIV1307H, PHY1498H, PHY2504H, PHY2505H, CHE1123H, JCC1313H.
- 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

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, MIE517H, MIE1128H, 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.

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

AER0503H	Aeroelasticity
AER1202H	Advanced Flight Dynamics
AER1211H	Human Control of Flight Systems
AER1216H	Fundamentals of Unmanned Aerial Vehicles
AER1217H	Development of Autonomous Unmanned Aerial Systems (prerequisite: AER1216H)

Aerodynamics, Fluid Dynamics, and Propulsion

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

Structures and Multidisciplinary Optimization

AER0501H	Advanced Mechanics of Structures
AER1403H	Advanced Aerospace Structures (PR)
AER1410H	Topology Optimization
AER1415H	Computational Optimization
AER1416H	Numerical Methods for Uncertainty Quantification
AER1418H	Variational Methods for Partial Differential Equations

Sustainable Aviation

AER1315H	Sustainable Aviation

Robotics and Space Systems Engineering

AER0506H	Spacecraft Dynamics and Control I
AER0521H	Mobile Robotics and Perception
AER0525H	Robotics
AER1503H	Spacecraft Dynamics and Control II
AER1512H	Multibody Dynamics
AER1513H	State Estimation for Aerospace Vehicles
AER1515H	Perception for Robotics (exclusions: AER1514H, ROB1514H)
AER1516H	Robot Motion Planning
AER1517H	Control for Robotics
AER1520H	Microsatellite Design I
AER1521H	Microsatellite Design II
ROB1514H	Mobile Robotics

Management and Policy

AER1601H	Aerospace Engineering and Operations Management
AER1604H	Air Accident Investigation

Engineering Physics

AER0507H	Introduction to Fusion Energy
AER1717H	Applied Plasma Physics I (reading course)

Research Seminars and Professional Courses

AER1800H	Research Seminar in Aerospace Science and Engineering (for first-year MASc students only)
AER1810H	MEng Project (for MEng students only)
JDE1000H	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.)

Reading Courses

AER1820H	Directed Reading in Aerospace Studies

APS Engineering Course

APS1012H	Managing Business Innovation and Transformational Change
APS1043H	Writing Your Own Patent Application

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
Email: anthropology.graduate@utoronto.ca
Telephone: (416) 978-5416
Fax: (416) 978-3217

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Anthropology: Graduate Faculty

Full Members

Allen, Andrea - PhD
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Barker, Joshua - BA, MA, PhD
Begun, David - BA, MA, PhD
Boddy, Janice - BA, MA, PhD
Bozcali, Firat - BA, MA, MA, PhD

Butt, Waqas - BA, PhD
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Chazan, Michael - BA, MA, PhD
Cody, Francis - PhD
Coleman, Simon - BA, PhD
Coupland, Gary - BA, MA, PhD
Crawford, Gary - BSc, MA, PhD
Cunningham, Hilary - BA, MA, PhD
Dahl, Bianca Jane - BA, MA, PhD
Danesi, Marcel - BA, MA, PhD
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Friesen, Max - BA, MA, PhD
Gillison, Gillian - BA, PhD
Harrison, Timothy - BA, MA, PhD
Hartblay, Cassandra Sarah - BA, MA, PhD
Heller, Monica - BA, MA, PhD
Hillewaert, Sarah Marleen - BA, MA, MA, PhD
Kalmar, Ivan - BA, MA, PhD
Kassamali, Sumayya - PhD
Kilroy-Marac, Katie - MA, MPH, PhD
Klassen, Pamela - BA, MA, PhD
Knappett, Carl - MA, PhD
Krupa, Chris - BA, MA, PhD
Lambek, Michael - BA, MA, PhD
Lehman, Shawn - BA, MA, PhD
Li, Tania - BA, PhD
Luong, Hy Van - BA, PhD
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Novroski, Nicole - BSc, MS, PhD
Parra, Esteban - BA, MA, PhD
Paz, Alejandro - BA, MPA, MA, PhD
Pfeiffer, Susan - BA, MA, PhD
Rogers, Tracy - BA, MA, PhD
Samson, David - BA, PhD
Sanders, Todd - BA, MA, MSc, PhD
Satsuka, Shiho - BA, BA, MA, PhD
Sawchuk, Lawrence - BA, MA, PhD
Schillaci, Michael - BA, MA, PhD
Schroeder, Lauren - BSc, BSc, PhD
Sellen, Daniel - BA, AM, PhD
Sidnell, Jack - BA, MA, PhD
Silcox, Mary Teresa - BSc, PhD
Smith, David - BA, MA, PhD
Song, Jesook - BA, PhD
Swenson, Edward - BA, MA, PhD
Taylor, Janelle - PhD
Wardlow, Holly - BA, MA, MPH, PhD
Wool, Zoe - BA, MA, PhD
Xie, Liye - BA, MA, PhD

Members Emeriti

Burton, Frances - BSc, MA, PhD
Chew, John - BA, MA, PhD
Drewitt, Robert - BA, PhD
Kleindienst, Maxine - BA, MA, PhD
Latta, Martha - BA, MA, DPhil
Lee, Richard - BA, MA, PhD
Levin, Michael - BA, MA, PhD
Mavalwala, Jamshed D. - MS, PhD
Philpott, Stuart - BA, MA, PhD
Ray, Ajit - BSc, MSc, PhD
Samarin, William - BA, PhD
Vanderburgh, Rosamond - BA, MA

Associate Members

Bright, Kristin - PhD
Cipolla, Craig - BA, MA, PhD
Cummings, Maggie Irene - BA, MA, PhD
Forni, Silvia - BA, MA, PhD
Gotlib Conn, Lesley - BA, MA, PhD
Jennings, Justin - BA, MA, PhD
Meneley, Anne - PhD
Mortensen, Lena - BA, MA, PhD
Romain, Sandra Jane - PhD
Sammons, Edward - PhD
Sapirstein, Philip - PhD, PhD, PhD
Shugar, Aaron - BA, MS, PhD

Anthropology: Anthropology MA

Master of Arts

Program Description

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

Time Limit

3 years full-time;
6 years 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 are required to 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:
  - Be resident on campus for one year.
  - Complete the minimum of 3.0 FCEs (noted above), of which at least 1.5 FCEs are normally in anthropology.
  - 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.
  - Present and defend a **thesis proposal**.
  - 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.
  - An approved Ethics Protocol for all students working with living organisms and modern human remains.

Program Length

4 years

Although the program has been designed for completion in four years, some students may require a longer period to complete all of the requirements.

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 Anthropology's additional admission requirements stated below.
- 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.
- 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.
- 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 are required to 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.

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:
  - 3.0 FCEs, normally taken in Year 1
  - 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:
  - Be resident on campus for one year.
  - Complete the minimum 5.0 FCEs (noted above), of which at least 2.5 FCEs are normally in anthropology.
  - 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.
  - Present and defend a **thesis proposal**.
  - 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.
  - An approved Ethics Protocol for all students working with living organisms and modern human remains.

Program Length

5 years

Although the program has been designed for completion in five years, some students may require a longer period to complete all of the requirements.

Time Limit

7 years

Anthropology: Anthropology MA, MSc, PhD Courses

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

General

ANT1096H	Quantitative Methods I
ANT1099H	Quantitative Methods II
ANT1155H,Y[+]	Research (or reading seminar)
ANT1156H,Y[+]	Research (or reading seminar)
ANT1157H,Y[+]	Research (or reading seminar)
ANT1158H,Y[+]	Research (or reading seminar)
ANT2000Y[0]	MA Research Paper
ANT2500Y[0]	MSc Research Paper
EIP3000H	Coordinating Seminar: Ethnic, Immigration and Pluralism Studies (for students in the Ethnic, Immigration and Pluralism Studies collaborative specialization)

[0] 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

JPA1040Y	Advanced Physics and Archaeology
ANT4010H	Archaeology in Contemporary Society
ANT4020H	Archaeology Theory
ANT4025H	Archaeology of Eastern North America
ANT4026H	Arctic Archaeology
ANT4030H	Artifacts
ANT4031H	Value
ANT4038H	Archaeology of Urban Development
ANT4039H	Origin and Nature of Food Producing Societies
ANT4040H	Archaeology of Hunter-Gatherers
ANT4041H	Landscape Archaeology
ANT4042H	Archaeology of Complex Hunter-Gatherers
ANT4043H	Archaeology of Ritual, Religion, and Ideology
ANT4044H	Interregional Interaction in the Ancient World
ANT4050H	Zooarchaeology
ANT4051H	Archaeology and Climate Change
ANT4059H	Anthropological Understanding of Cultural Transmission
ANT4060H	Specific Problems I
ANT4065H	Specific Problems II
ANT4066H	Household Archaeology
ANT4068H	Archaeology of Technology
ANT4069H	Writing Archaeology
ANT4070H	Archaeologies of Place, Urbanism, and Infrastructures

Evolutionary Anthropology

ANT3005H	Advanced Topics in Paleoanthropology
ANT3010H	Human Osteology: Theory and Practice
ANT3011H	Palaeopathology
ANT3031H,Y	Advanced Research Seminar I
ANT3032H,Y	Advanced Research Seminar II
ANT3033H,Y	Advanced Research Seminar III
ANT3034H,Y[+]	Advanced Research Seminar IV
ANT3041H	Evolutionary Perspectives on Growth and Development
ANT3042H	Advanced Topics in Primate Ecology
ANT3045H	Advanced Topics in Non-Human Primate Evolution
ANT3046H	Paleoecology in Primate and Human Evolution
ANT3047H	Evolutionary Anthropology Theory
ANT3048H	Primatological Theory and Methods
ANT3049H	Advanced Seminar in Evolutionary Morphology (prerequisite: ANT3047H)
ANT3050H	Species Concepts and Human Evolution
ANT3438H	Skeletal Trauma and Violence: Theory and Practice
ANT3439H	Advanced Seminar in Forensic Anthropology
ANT3440H	Molecular Anthropology: Theory and Practice

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

Linguistic and Semiotic Anthropology

JAL1155H	Language and Gender
ANT5144H	Foundations in Linguistic Anthropology
ANT5148H	Language, Ideology and Political Economy
ANT5150H	Nation, State, and Language in Francophone Canada
ANT5151H	Metaphor, Language, and Science
JSA5147H	Language, Nationalism, and Post-Nationalism

Medical Anthropology

ANT7001H	Medical Anthropology I
ANT7002H	Medical Anthropology II
ANT7003H	Global Health: Anthropological Perspectives

Sociocultural Anthropology

ANT6003H	Critical Issues in Ethnography I
ANT6004H	Critical Issues in Ethnography II
ANT6005H	The Politics of Distribution: Work, Welfare and Abandonment in Precarious Times
ANT6006H	Genealogies of Anthropological Thought
ANT6007H	Magic, Science, and Religion
ANT6014H	Media and Mediation
ANT6017H	Post-colonial Science Studies and the Cultural Politics of Knowledge Translation
ANT6018H	Approaches to Nature and Culture
ANT6019H	Anthropology of Neoliberalism
ANT6021H	Political Anthropology: State, Power, and Sovereignty
ANT6027H	Anthropology of Violence
ANT6029H	Anthropology of Capitalism
ANT6030H	Anthropology and the Ethical Imagination
ANT6031H,Y	Advanced Research Seminar I
ANT6032H	Advanced Research Seminar II
ANT6032Y	Advanced Research Seminar
ANT6033H,Y	Advanced Research Seminar III
ANT6034H,Y	Advanced Research Seminar IV
ANT6035H	Advanced Research Seminar
ANT6036H	Advanced Research Seminar
ANT6037H,Y	Advanced Research Seminar VII
ANT6038H,Y[+]	Advanced Research Seminar VIII
ANT6040H	Research Design and Fieldwork Methods
ANT6050H	Reading Course
ANT6055H	Anthropology of Subjectivity and Personhood
ANT6056H	Decolonizing Diversity Discourse: Critical and Comparative Accounts of Multiculturalism and Settler Colonialism
ANT6057H	Anthropology and Literature
ANT6058H	Anthropology of Normativity
ANT6059H	Anthropology and History
ANT6060H	Anthropology and Indigenous Studies in North America
ANT6061H	Anthropology of Sexuality and Gender
ANT6062H	Disability Anthropology
ANT6063H	Anthropology of Infrastructures
ANT6064H	Evidence and Uncertainty: The Politics of Law and Science
ANT6065H	Anthropology in/of Troubled Times
ANT6100H	History of Anthropological Thought
ANT6150H	Proposing Ethnographic Research
ANT6200H	Ethnographic Practicum

[+] *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:
  - Practice-Based Inquiry in Psychology and Educational Practice;
  - Research-Intensive Training in Psychology and Education (admissions have been administratively suspended)

EdD

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

Counselling and Clinical Psychology

MA

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

PhD

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

Counselling Psychology

MEd

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

EdD

- Fields:
  - Counselling and Psychotherapy
  - School Psychology

Developmental Psychology and Education

MA, MEd, and PhD

- Emphases:
  - Early Learning (PhD, flexible-time only)
  - 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
  - Counselling and Clinical Psychology, MA, PhD
- Aging, Palliative and Supportive Care Across the Life Course
  - Counselling and Clinical Psychology, MA, PhD
  - Counselling Psychology, MEd, EdD
- Community Development
  - Counselling and Clinical Psychology (Clinical and Counselling Psychology field), MA
  - Counselling Psychology, MEd
- Educational Policy
  - Developmental Psychology and Education, MA, MEd, PhD
- Indigenous Health
  - Counselling and Clinical Psychology, MA, PhD
  - Counselling Psychology, MEd, EdD

- Neuroscience
  - Developmental Psychology and Education, MA, PhD
- Sexual Diversity Studies
  - Counselling and Clinical Psychology, MA, PhD
  - Counselling Psychology, MEd, EdD
- Women and Gender Studies
  - Counselling and Clinical Psychology, MA, PhD
  - 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, MASc, 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
Haltigan, John - BA, MA, PhD
Hidi, Suzanne - BA, MA, PhD
Jasinska, Kaja - DPhil
Kamenetsky, Stuart - MA, DPhil, PhD

Katz, Steven - BA, MEd, PhD
Plamondon, Andre - BA, PhD
Rashid, Tayyab - DPhil
Rice, Carla - BA, PhD
Saylor, Megan - PhD
Schmidt, Fred - BA, MA, PhD
Shin, Karen - MD
Silver, Judith - BSc, PhD
Smylie, Janet - MPH, MD
Travers, Robert - BA, MA, PhD
Wade, Mark - PhD

APHD: Child Study and Education MA

Master of Arts

Program Description

The Master of Arts in Child Study and Education Program is offered at the Dr. Eric Jackman Institute of Child Study, a centre of professional teacher training and research in childhood and education, which includes a Nursery through Grade 6 Laboratory School.

The philosophy of this program is based on the belief that successful teaching requires an understanding of how children's capacities, concerns, and behaviour change with age, how individual differences reflect developmental changes, and how social and physical environments influence children's development.

The program introduces students to educational and developmental theory and research relevant to educational settings, showing how this research can inform classroom practice. Students also learn how to objectively study children, using both practical assessment and formal methods of inquiry. These areas of knowledge combined with knowledge of effective teaching methods (such as an inquiry-based approach) and learning environments result in educational practices that build on children's current levels of development.

The non-thesis program requires two years of full-time study leading to a Master of Arts degree. Graduates are recommended to the Ontario College of Teachers for a **Certificate of Qualification**, which qualifies the holder to teach in the primary and junior divisions (junior kindergarten to grade 6) of Ontario schools. Research is embedded throughout the courses and the program.

This program offers two fields:

- Practice-Based Inquiry (PBI) in Psychology and Educational Practice
- Research-Intensive Training (RIT) in Psychology and Education (admissions have been administratively suspended)

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 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.
    - 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).
  - APD2221Y *Advanced Teaching Practicum* (1.0 FCE), a 12-week full-time internship to be taken in one session.
  - APD2222H *Professional Practice Project: Role A* (0.5 FCE). Taken during the internship session of Year 2.
  - APD2223H *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).
    - APD2221Y *Advanced Teaching Practicum* (1.0 FCE), a 12-week full-time internship to be taken in one session.
- APD2001Y^0 *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

APHD: Child Study and Education EdD Emphases

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

APD2200Y	Child Study: Observation, Evaluation, Reporting, and Research
APD2201Y	Childhood Education Seminar I
APD2210Y	Introduction to Curriculum I: Core Areas
APD2220Y	Teaching Practicum
APD2270Y	Introduction to Special Education and Adaptive Instruction
Plus	PBI field only: APD1226H Foundations in Inquiry and Data-Based Decision Making **or** RIT field only: APD1209H Research Methods and Thesis Preparation in AP&HD
Plus	Three elective half courses to be completed during the Spring/Summer session.
Plus	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.

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

APD2211H	Theory and Curriculum I: Language and Literacy
APD2212H	Theory and Curriculum II: Mathematics
APD2214H	Curriculum and Pedagogies for Cross-Curricular Teaching (Prerequisite: APD2210Y.)
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

APD2202H	Childhood Education Seminar II: Advanced Teaching
APD2221Y	Advanced Teaching Practicum

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.

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

APD2232H	Consultation Skill Development for Educators
APD2270Y	Introduction to Special Education and Adaptive Instruction
APD2275H	Technology for Adaptive Instruction and Special Education
APD2293H	Interpretation of Educational Research
APD2296H	Reading and Writing Difficulties
APD3303H	Advanced Study of Tools and Research Methods for Investigating Problems of Practice: Data-Driven Research for Decision-Making
APD3305H	Systems and Organizational Change
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
JDS1249H	Social-Emotional Development and Applications

Individual Reading and Research Courses

APD2252H	Individual Reading and Research in Human Development and Applied Psychology: Master's Level

[0] Course that may continue over a program. The course is graded when completed.

APHD: Child Study and Education EdD Courses

APD1289H	Multivariate Analysis with Applications (RM)
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD3301H	Issues in Child Study and Education: Research, Policy, and Problems of Practice (RM)
APD3302H	Advanced Study of Critical Issues in Special Education, Mental Health, and Child Security (Prerequisite: APD3301H.)
APD3303H	Advanced Study of Tools and Research Methods for Investigating Problems of Practice: Data-Driven Research for Decision-Making
APD3304H	Research Proposal Development (RM)
APD3305H	Systems and Organizational Change
JOI1288H	Intermediate Statistics and Research Design (RM)
JOI3228H	Mixed Methods Research Design in Social Sciences (RM)
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 fulfil 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 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 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 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.
  - 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.
- 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 APD3268Y *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 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)*; 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.

APD1202Y	Theories and Techniques of Counselling and Psychotherapy
APD1203Y+	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD1208Y+	Cognitive and Personality Theory and Assessment
APD1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD1228H	Couples Counselling
APD1260H	Family Therapy (Exclusion: APD1261H.)
APD1261H	Group Work in Counselling and Psychotherapy
APD1263H	Research Methods for Clinical and Counselling Psychology (RM)
APD1267H	Emotion-Focused Therapy (Co-requisite: APD1202Y. Exclusion: APD5004H.)
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD3215H	Advanced Psychotherapy Seminar
APD3217Y+	Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit)

APD3225H	Assessment and Diagnosis of Personality and Psychopathology
APD3260H	Psychodiagnostic Systems
APD3261H+	Clinical Supervision and Consultation Practicum (Pre- or co-requisite: APD3217Y+.)
APD3268Y	Internship in Clinical and Counselling Psychology
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
JOI1287H	Introduction to Applied Statistics (RM)
JOI1288H	Intermediate Statistics and Research Design (RM)
JOI3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)

Individual Reading and Research Courses

APD2252H	Individual Reading and Research in Human Development and Applied Psychology: Master's Level
APD3252H	Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

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

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
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

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

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
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

CPS1101H	Clinical Research Design (Exclusion: APD1263H Research Methods for Clinical and Counselling Psychology.)
CPS1102H	Statistical Techniques I (Exclusion: JOI1287H Introduction to Applied Statistics.)
CPS1103H	Statistical Techniques II (Exclusion: JOI1288H Intermediate Statistics and Research Design.)
CPS1201H	Neurobiological Bases of Behaviour
CPS1209H	Clinical Neuropsychology
CPS1301H	Cognitive-Affective Bases of Behaviour
CPS1401H	Social and Interpersonal Bases of Behaviour
CPS1501H	Personality
CPS1601H	Psychopathology (Exclusion: APD3260H Psychodiagnostic Systems.)
CPS1701H	Psychological Assessment I (Exclusion: APD3224H Individual Cognitive and Personality Assessment.)
CPS1702H	Psychological Assessment II
CPS1801H	Psychotherapy (Exclusion: APD1202Y Theories and Techniques of Counselling and Psychotherapy.)
CPS1802H	Applied Interventions in Clinical Psychology (Exclusion: APD1203Y+ Practicum I: Interventions in Counselling Psychology and Psychotherapy.)
CPS1803H	Practicum in Psychological Interventions (Exclusion: APD1203Y+ Practicum I:

	Interventions in Counselling Psychology and Psychotherapy.)
CPS1809H	Clinical Psychopharmacology
CPS1810H	Advanced Psychotherapy
CPS1901H	Ethics (Exclusion: APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy.)
CPS2901H	Practicum in Clinical Supervision
CPS2902H	Quality Assurance and Consultation
CPS2999H	Summer Practicum
CPS3801H	Multi-Person Therapies (Exclusions: APD1228H Couples Counselling, APD1260H Family Therapy, and APD1261H Group Work in Counselling and Psychotherapy.)
CPS3901H	The Historical and Scientific Foundations of Psychology (Exclusion: APD3204H Contemporary History and Systems in Human Development in Applied Psychology.)
CPS3999H	Clinical Placement I
CPS4999H	Clinical Placement II
CPS5001H	Directed Readings
CPS5002H	Directed Readings
CPS5999Y	Internship (Exclusion: APD3268Y Internship in Clinical and Counselling Psychology.)
CPS6999H	Clinical Placement III
CPS7999H	Clinical Placement IV

APHD: Counselling Psychology MEd; Field: Counselling and Psychotherapy

Master of Education

Program Description

The **field in Counselling and Psychotherapy**, within the Counselling Psychology MEd degree program, provides individuals with the opportunity to learn and develop counselling skills appropriate for counselling individuals across a variety of work settings. Students are encouraged to tailor their courses and practicum learning experiences to meet their particular learning goals. Examples of the types of goals for which suitable programs of study could be developed include counselling and psychotherapy with adults, college and university students, or older adults: career counselling; counselling with diverse clients; and counselling and psychotherapy in community mental health and family service settings. The program of study provides 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.

Contact

Master of Education / Master of Medicine Program
Web:
www.oise.utoronto.ca/aphd/Home/Future_Students/Master_s_Degrees/MEd_Global_Mental_Health_Dual_Degree_Program/

Master of Education Program
Department of Applied Psychology and Human Development, University of Toronto
Email: admissions.oise@utoronto.ca

Master of Medicine Program
Department of Medical Psychology and Mental Health, China Medical University
Email: mqu@cmu.edu.cn

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)

APHD: Counselling Psychology MEd; Field: Guidance and Counselling

Master of Education

Program Description

The **field in Guidance and Counselling**, within the Counselling Psychology MEd degree program, provides individuals with the opportunity to learn and develop skills appropriate for the field of guidance and counselling in the schools. Strong preference for admission to this field is given to experienced teachers who are interested in specializing in guidance and counselling in the schools. The program of study provides students with the basic preparation for certification as a Certified Canadian Counsellor (CCC) with the Canadian Counselling and Psychotherapy Association (CCPA).

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, 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:
  - 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.
  - 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.
  - 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).
  - 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
      - APD5284Y *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 (APD3271H[0] *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

[0] 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[0] *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

[0] 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 Courses

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

APD1202Y	Theories and Techniques of Counselling and Psychotherapy
APD1203Y+	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD1204H	Personality Theories
APD1207H	Counselling Topics in Sexual Orientation and Gender Identity Diversity
APD1214H	Critical Multicultural Practice: Diversity Issues in Counselling and Psychotherapy
APD1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD1228H	Couples Counselling
APD1229H	Individual and Group Psychotherapy for Counselling
APD1232H	Mindfulness Interventions in Counselling and Psychotherapy (Exclusion: APD5005H.)
APD1235H	Technology, Play, and Social Media in Adolescence (Exclusion: APD5017H.)
APD1245H	Brief Strategies in Counselling and Psychotherapy
APD1247H	Practicum in Adult Counselling and Psychotherapy
APD1252H	Individual Reading and Research in Counselling Psychology: Master's Level
APD1260H	Family Therapy (Exclusion: APD1261H.)
APD1261H	Group Work in Counselling and Psychotherapy
APD1262H	Educational and Psychological Testing for Counselling
APD1266H	Career Counselling and Development: Transition from School to Work
APD1267H	Emotion-Focused Therapy (Co-requisite: APD1202Y. Exclusion: APD5004H.)
APD1268H	Career Counselling and Development: Transitions in Adulthood
APD1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD1277H	Global Indigenous Healing in Counselling and Psychotherapy
APD1278H	Cognitive Therapy
APD1282H	Introduction to Global Mental Health and Counselling Psychology
APD1283H	Peer and Video-Based Counselling with Practicum Field-Based Learning in Global Mental Health
APD1290H	Indigenous Healing in Counselling and Psychoeducation
APD1902H	Theories and Techniques of Counselling in a Global Context
APD2286H	Global Indigenous Healing in Counselling and Psychotherapy
APD2291H	Introduction to Global Mental Health and Counselling Psychology
APD2293H	Interpretation of Educational Research
APD2298H	Peer and Video-Based Counselling with Practicum Field-Based Learning in Global Mental Health
APD3115H+	Research Proseminar in Counselling and Psychotherapy
APD3160H	Advanced Family Therapy
APD3163H	Advanced Multicultural Counselling and Psychotherapy
APD3178H	Advanced Cognitive Behaviour Therapy
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM) (Prerequisites: MEd students must have completed APD1212H or APD2293H or JOI1287H.)
APD3215H	Advanced Psychotherapy Seminar
APD3217Y+	Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit)
APD3260H	Psychodiagnostic Systems
APD3261H+	Clinical Supervision and Consultation Practicum (Pre- or co-requisite: APD3217Y+.)
APD3268Y	Internship in Clinical and Counselling Psychology
APD3270H	EdD Internship
APD3271H0	Additional PhD Practicum
APD3401H	Assessment with Culturally and Linguistically Diverse Children, Youth, and Families
APD3402H	Intervention with Culturally and Linguistically Diverse Children, Youth, and Families

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

[0] 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

developmental psychology and human development and their implications for practice with children in educational and other applied settings. The Master of Education (MEd) program is designed for the reflective teacher or other practitioner in education or related fields. This is a degree primarily designed for those working in applied settings and it does not require a research thesis.

Students take foundation courses in human development and research methodology. 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 MEd 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's additional admission requirements stated below.
- Admission to the MEd program normally requires an appropriate bachelor's degree with standing equivalent to a University of Toronto mid-B or better.
- Applicants normally possess a teaching certificate and have at least one year of relevant professional experience.

Program Requirements

- **Coursework.** Students must complete **5.0 full-course equivalents (FCEs)** as follows:
  - APD1200H *Foundations of Human Development and Education* (0.5 FCE).
  - APD2293H *Interpretation of Educational Research* (0.5 FCE).
  - 2.0 additional FCEs must be selected from the department electives list, available on the departmental website or in the Applied Psychology and Human Development program guidelines.
  - The remaining 2.0 elective FCEs may be taken from within or outside the department. Elective courses must be chosen in consultation with the student's faculty advisor. Students are asked to meet with their faculty advisor in the first session of their program.

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

APHD: Developmental Psychology and Education MEd; Emphasis: Program Evaluation

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 fulfil 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 fulfil 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 *Researching 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.

APD1200H	Foundations of Human Development and Education
APD1201H	Child and Adolescent Development (Prerequisite: at least one of APD1233H or APD1249H, or permission of the instructor.)

APD1206H	Mind, Brain, and Instruction (Prerequisite: at least one of APD1233H or APD1249H, or permission of the instructor. Exclusion: APD5012H.)
APD1209H	Research Methods and Thesis Preparation in Human Development and Applied Psychology
APD1210H	Research Practicum (RM)
APD1211H	Psychological Foundations of Early Development and Education
APD1212H	Basics to Program Evaluation in Social Sciences (Exclusion: APD5021H.)
APD1213H	Psychology and Education of Students with ADHD (Prerequisite: at least one of APD1281H, APD1297H, or permission of the instructor. Exclusion: APD5001H.)
APD1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
APD1231H	Mindful Self-Compassion for Educators (Exclusion: APD5018H.)
APD1233H	Cognitive Development and Applications
APD1235H	Technology, Play, and Social Media in Adolescence (Prerequisite: at least one of APD1233H, APD1249H, APD1281H, or permission of the instructor. Exclusion: APD5017H.)
APD1236H	Developmental Psychopathology (Prerequisite: at least one of APD1233H, APD1249H, or permission of the instructor.)
APD1241H	Outcomes of Early Education and Child Care
APD1256H	Child Abuse: Intervention and Prevention
APD1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD1272H	Play and Education
APD1280H	Symbolic Development and Learning
APD1281H	Education Exceptionalities, Special Education, and Adaptive Instruction
APD1286H	Foundations of Literacy Development for School Age Children
APD1289H	Multivariate Analysis with Applications (RM)
APD1290H	Indigenous Healing in Counselling and Psychoeducation
APD1292H	Instrument Design and Analysis (RM)
APD1294H	Technology, Psychology, and Play
APD1295H	Adolescent Mental Health: An Examination of Risk and Resilience (Prerequisites: APD1249H and APD1297H.)
APD1296H	Assessing School-Aged Language Learners
APD1297H	Mental Health in the Classroom: How Educators Can Help Our Most Vulnerable Students
APD1298H	Imagination, Reasoning, and Learning
APD1299H	Language Acquisition and Development in Early Childhood
APD2275H	Technology for Adaptive Instruction and Special Education
APD2293H	Interpretation of Educational Research
APD2296H	Reading and Writing Difficulties
APD3200H	Research Pro-seminar in Human Development and Applied Psychology
APD3201H	Qualitative Research Methods in Human Development and Applied Psychology (RM)
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM) (Prerequisite: MEd students must have completed APD1212H or APD2293H or JOI1287H.)
APD3273H	Researching Early Learning: An Overview Course of Quantitative and Qualitative Methodology
APD3274H	Early Learning and the Thesis
APD3305H	Systems and Organizational Change (Exclusion: APD6006H.)
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
JDS1249H	Social-Emotional Development and Applications
JDS3000H	Advanced Methods in Developmental Science
JOI1287H	Introduction to Applied Statistics (RM)
JOI1288H	Intermediate Statistics and Research Design (RM)

Individual Reading and Research Courses

APD2252H	Individual Reading and Research in Human Development and Applied Psychology: Master's Level
APD3252H	Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

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).
  - JOI1288H *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 JOI1287H *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.

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 statistics 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.

APD1202Y	Theories and Techniques of Counselling and Psychotherapy
APD1205H	Ethical Issues in Applied Psychology
APD1207H	Counselling Topics in Sexual Orientation and Gender Identity Diversity
APD1215H	Psychological Assessment of School-Aged Children
APD1216H	Psychoeducational Assessment
APD1217H	Foundations of Proactive Behavioural and Cognitive-Behavioural Intervention with Children
APD1218H[+]	Seminar and Practicum in School-Based Assessment, Consultation, and Intervention
APD1222H	Approaches to Psychotherapy-Lifespan
APD1228H	Couples Counselling
APD1233H	Cognitive Development and Applications
APD1236H	Developmental Psychopathology
APD1245H	Brief Strategies in Counselling and Psychotherapy
APD1251H	Reading in a Second Language
APD1256H	Child Abuse: Intervention and Prevention
APD1271H	Perspectives on Executive Functions in Education: From Theory to Practice
APD1285H	Psychology and Education of Children with Learning Disabilities
APD1290H	Indigenous Healing in Counselling and Psychoeducation
APD1291H	Addictive Behaviours: Approaches to Assessment and Intervention
APD1295H	Adolescent Mental Health: An Examination of Risk and Resilience (Prerequisites: APD1249H and APD1297H.)
APD1299H	Language Acquisition and Development
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD3221H	Cross-Cultural Perspectives on Children's Problems
APD3222H	Approaches to Psychotherapy Across the Lifespan
APD3224H	Advanced Proactive Behavioural and Cognitive-Behavioural Interventions
APD3231H	Psychodynamic Bases of Therapy
APD3240H	Advanced Social and Emotional Assessment Techniques
APD3241H[+]	Seminar and Practicum in Clinical Assessment and Intervention
APD3242Y	Internship in School and Clinical Child Psychology
APD3243H	Additional PhD Practicum in Assessment and Intervention
APD3260H	Psychodiagnostic Systems
APD3286H	Developmental Neuropsychology
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
APD5284Y[+]	Assessment and Intervention with Culturally and Linguistically Diverse Children, Youth, and Families
JDS1233H	Cognitive Development and Applications
JOI1287H	Introduction to Applied Statistics (RM)
JOI1288H	Intermediate Statistics and Research Design (RM)

Individual Reading and Research Courses

APD2252H	Individual Reading and Research in Human Development and Applied Psychology: Master's Level
APD3252H	Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

[+] *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:
  - Curatorial Studies;
  - Studio

Collaborative Specializations

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

- Environmental Studies
  - Landscape Architecture, MLA
- Environment and Health
  - Landscape Architecture, MLA
- Knowledge Media Design
  - Architecture, MArch
  - Landscape Architecture, MLA
  - Urban Design, MUD
- Sexual Diversity Studies
  - 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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Telephone: (416) 946-3897

John H. Daniels Faculty of Architecture, Landscape, and Design
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

Levit, Robert - BA, MArch
Liu, An Te - BA, MArch
Lloyd, Sue - BA, MFA
Lobsinger, Mary Lou - BArch, BES, BA, MES, PhD
Margolis, Liat - BFA, MLA
McCarney, Patricia - BA, MCP, PhD
North, Alissa - BLA, MLA
Shim, Brigitte - BES, BArch
Sommer, Richard - BFA, BArch, MArch
Stankievech, Charles - BA, MFA
Verderber, Stephen - BSc, AA, MArch, PhD
White, Mason - BArch, MArch
Williamson, Shane - BSc, MArch
Wolff, Jane - AB, MLA
Wright, Robert - BSc, MLA
Members Emeriti
Baird, George - BArch
Steele, Lisa - BA
Associate Members
Akiyama, Mitchell - BFA, MFA, PhD
Babasikas, Petros - BArch, BA, MArch
Boigon, Brian - BArch
Carpenter, Tei - BA, MArch
Denegri, Maria - BA, BArch
Fischer, Barbara - BFA, MA
Fong, Steven - BArch, MArch
Hill, Jen - MLA
Hlady, Marla - BFA, MFA
Khemet, Bomani Ajamu - BASc, MEng, MBSc, PhD
Kim, Jeannie - AB, MArch, MA
Kwan, Will - BA, MFA
Laird, Mark - BA, MA, PHM
Lukachko, Alex - BES, MArch
Mazinani, Sanaz - BA, PhD
Miller, Laura J. - BA, MArch
Moukheiber, Carol Leila - BArch, BA
Peters, Brady - BS, BES, MArch, PhD
Petricone, Pina - MArch
Phiffer, Adrian - BArch, MArch UD
Piper, Michael - BS, MArch
Quiros Pacheco, Mauricio - MArch UD
Shelley, Elise - BSc, MArch, MLA
Shnier, John - BArch, BES
Sterling, Mark - BES, BArch

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 full-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

ARC1011Y	Design Studio 1
ARC1012Y	Design Studio 2
ARC2013Y	Design Studio 3
ARC2014Y	Design Studio 4

Design Studio Research

ARC3020Y **or**	Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y) **or**
LAN3016Y **or**	Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y) **or**

URD2013Y	Urban Design Studio Options (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y)
ARC3021Y	Design Studio Research 2 (prerequisite: ARC3020Y; exclusion: ARC4018Y)

Design Technology

ARC1022H	Design Technology 1
ARC2023H	Design Technology 2

History

ARC1031H	Historical Perspectives on Topics in Architecture 1
ARC1032H	Historical Perspectives on Topics in Architecture 2

Post Professional

ALA4010H	Field Course
ALA4020H	Thesis Preparation
ALA4021Y	Thesis I (prerequisite: ALA4020H)
ALA4022Y	Thesis II (prerequisite: ALA4021Y)
ALA4030H	Colloquium (prerequisites: ALA4010H and ALA4020H; exclusion: ALD4030H)

Professional Practice

ARC3051H	Professional Practice 1
ARC3052H	Professional Practice 2

Research Methods

ARC2017H	Research Methods

Technics and Planning

ARC1041H	Building Science 1
ARC1043H	Building Science 2
ARC1046H	Structures 1
ARC2042H	Site Engineering and Ecology
ARC2046H	Structures 2
ARC2047H	Building Science 3
ARC2048H	Building Science 4

Visual Communication

ARC1021H	Visual Communications

Elective Courses

Architecture and Health

ARC3600H to ARC3625H	Selected Topics in the History and Theory of Architecture and Health

Computer Modelling

ARC3200H to ARC3225H	Selected Topics in Advanced Computer Applications

Design

ARC1100H	Selected Topics in Design
ARC2015H	Global Architecture: Urban Analysis and Documentation

History and Theory

ARC1035H	Toronto Architecture and Urban Form
ARC3031H	Analysis of Architectural Form
ARC3038H	Global Architecture: History and Theory
ARC3100H to ARC3125H	Selected Topics in Urban Design
ARC3300H to ARC3325H	Selected Topics in Architectural History and Theory

Independent Study

ARC3039H	Independent Study and Research in Architecture

Other

ARC3700H to ARC3725H	Selected Topics in Architecture
ARC3705H	Selected Topics in Architecture

ARC3706H	Selected Topics in Architecture

Professional Practice

ARC4500H to ARC4510H	Selected Topics in Professional Practice

Technics and Planning

ARC3400H to ARC3425H	Selected Topics in Architecture and Technology
ARC3500H to ARC3525H	Selected Topics in Sustainable Design

Architecture, Landscape, and Design: Architecture, Landscape, and Design PhD

Doctor of Philosophy

Program Description

The PhD program in Architecture, Landscape, and Design engages students in advanced research from an intra-disciplinary 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

Architecture, Landscape, and Design: Architecture, Landscape, and Design PhD Courses

Core Courses

ALD4030H	Doctoral Research Colloquium
ALD4040H	Theories and Methods
ALD4050H	Research Practicum (Credit/No Credit)
ALD4060H	Preparation for Thesis (Credit/No Credit)

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:

ARC3031H	Analysis of Architectural Form
ARC3100H to ARC3125H	Selected Topics in Urban Design
ARC3200H to ARC3225H	Selected Topics in Advanced Computer Applications
ARC3300H to ARC3325H	Selected Topics in Architectural History and Theory
ARC3400H to ARC3425H	Selected Topics in Architecture and Technology
ARC3500H to ARC3525H	Selected Topics in Sustainable Design
ARC3600H to ARC3625H	Selected Topics in the History and Theory of Architecture and Health
ARC3700H to ARC3725H	Selected Topics in Architecture
ARC4090H	Directed Reading in Design (Credit/No Credit)
ARC4500H to ARC4510H	Selected Topics in Professional Practice
LAN3900H to LAN3910H	Landscape Architecture Topics: History, Theory, Criticism
VIS3001H	Advanced Readings in Visual Studies
VIS3002H	Advanced Readings in Curatorial Studies
VIS3003H	Special Topics in Art and Culture

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

LAN1011Y	Design Studio 1
LAN1012Y	Design Studio 2
LAN2013Y	Design Studio 3 (prerequisite: LAN1012Y)
LAN2014Y	Design Studio 4
LAN3016Y **or**	Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y) **or**
URD2013Y **or**	Urban Design Studio Research (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y) **or**
ARC3020Y	Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y)
LAN3017Y	Design Studio Thesis

Environment

LAN1041H	Field Studies 1
LAN1043H	Field Studies 2
LAN2045H	Landscape Ecology I
LAN2046H	Landscape Ecology II (prerequisite: LAN2045H)
LAN2047H	Landscape Hydrology I
LAN2048H	Landscape Hydrology II (prerequisite: LAN2047H)

History, Theory, Criticism

LAN1031H	History, Theory, Criticism 1
LAN1032H	History, Theory, Criticism 2
LAN1037H	Plants and Design I
LAN1038H	Plants and Design II (prerequisite: LAN1037H)
LAN2037H	Contemporary Landscape Theory

Post Professional

ALA4010H	Field Course
ALA4020H	Thesis Preparation
ALA4021Y	Thesis I (prerequisite: ALA4020H)
ALA4022Y	Thesis II (prerequisite: ALA4021Y)
ALA4030H	Colloquium (prerequisites: ALA4010H and ALA4020H; exclusion: ALD4030H)

Proseminar

LAN3051H	Landscape Architecture Research Methods
LAN3052H	Professional Practice

Technology

LAN1047H	Site Engineering I
LAN1048H	Site Engineering II
LAN2042H	Landscape Materials, Assemblies, Techniques
LAN3045H	Advanced Site Technologies

Visual Communication

LAN1021H	Visual Communication 1
LAN1022H	Visual Communication 2
LAN2023H	Intermediate Visual Communication
LAN3025H	Advanced Visual Communication

Elective Courses

Design

LAN3200H to LAN3210H	Landscape Architecture Topics: Design

Environment

LAN3300H to LAN3310H	Landscape Architecture Topics: Environment
LAN3500H to LAN3510H	Landscape Architecture Topics: Plants

History, Theory, Criticism

LAN3039H	Independent Study
LAN3700H to LAN3710H	Landscape Architecture Topics: Society
LAN3900H to LAN3910H	Landscape Architecture Topics: History, Theory, Criticism

Proseminar

LAN3600H to LAN3610H	Landscape Architecture Topics: Practice

Technology

LAN3400H to LAN3410H	Landscape Architecture Topics: Techniques
LAN3800H to LAN3810H	Landscape Architecture Topics: Technology

Visual Communication

LAN3100H to LAN3110H	Landscape Architecture Topics: Communication

Architecture, Landscape, and Design: Urban Design MUD

Master of Urban Design

Program Description

The Master of Urban Design (MUD) is a post-professional program that prepares architects and landscape architects for design-based research and professional practice at the urban and regional scales. The MUD program is committed to design as a primary medium of operation and research in a broad intellectual framework that includes geography, environmental studies, social sciences, media studies, economics, and engineering. It aims for responsible and creative design in the context of contemporary city and region building, with attention to new paradigms of urbanization, global economic restructuring, and information technology. The program emphasizes a coherent intellectual approach that is committed to analysis and critique and seeks to become the central Canadian forum for advanced research, design innovation, scholarship, criticism, and debate in urban 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

URD1011Y	Urban Design Studio
URD1012Y	Urban Design Studio Options
URD2012Y	Independent Studio in Urban Design (may be undertaken in lieu of an option studio)
URD2013Y **or** LAN3016Y **or** ARC3020Y	Urban Design Studio Research (prerequisites: URD1011Y, URD1012Y; exclusions: ARC3015Y, LAN3016Y) **or** Landscape Design Studio Research (exclusions: ARC3020Y, URD2013Y) **or** Design Studio Research 1 (prerequisite: ARC2014Y; exclusions: ARC3016Y, LAN3016Y, URD2013Y)
URD2015Y	Urban Design Studio Thesis

History, Theory, Criticism

URD1031H	The History of Toronto Urban Form
URD1041H	Introduction to Urban Design Theory

Other

URD1021H	Urban Design Visual Communications
URD1044H	Urban Design and Development
URD2014H	Thesis Research and Preparation
URD2041H	Business and Land Use Planning in Real Estate Development

Elective Courses

History, Theory, Criticism

URD1200H to URD1225H	Selected Topics in History and Theory of Urban Design
URD1500H to URD1525H	Selected Topics in Urban Design

Other

URD1022H	Topics in Computer-Aided Urban Design
URD1042H	Urban Design and Environmental Systems
URD1300H	Selected Topics in Digital Urbanism

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:
  - 4.5 FCEs from the approved course list for curatorial studies
  - 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:
  - artist's statement that includes a description of the proposed body of work in studio to be undertaken during the two-year program;
  - full curriculum vitae (CV) with details of exhibition, professional activity, and education;
  - documentation of recent studio 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 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:
  - 4.5 FCEs from the approved course list for curatorial studies
  - 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 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

VIS1000Y	MVS Proseminar
VIS1004H	Internship
VIS1010H	Contemporary Art Since 1960
VIS1020H	Contemporary Art: Theory and Criticism
VIS1101H	Paradigmatic Exhibitions: History, Theory, Criticism
VIS1102H	MVS Curatorial Research
VIS2000Y	MVS Proseminar
VIS2002H	MVS Research and Writing
VIS2101Y	MVS Curatorial Studies Exhibition Project
VIS2102H	MVS Curatorial Studies Collaboration

MVS Studio Courses

VIS1000Y	MVS Proseminar
VIS1001H	Interdisciplinary Studio Practicum/Critiques I
VIS1003H	Interdisciplinary Studio Practicum/Critiques II
VIS1004H	Internship
VIS1010H	Contemporary Art Since 1960
VIS1020H	Contemporary Art: Theory and Criticism
VIS2000Y	MVS Proseminar
VIS2001H	Studio Practicum/Critiques III
VIS2002H	MVS Research and Writing
VIS2003Y	MVS Project

MVS Elective Courses

VIS1005H	Artist in Residence Master Class
VIS3001H	Advanced Readings in Visual Studies
VIS3002H	Advanced Readings in Curatorial Studies
VIS3003H	Special Topics in Art and Culture

Art History

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

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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.

    - The exam consists of an in-house written section, a take-home essay, and an oral exam.
    - 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 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 1, 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

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

FAH1001H	Methods of Art History

Ancient

FAH2018H	Art and the Aegean Bronze Age: Contemporary Perspectives
FAH2021H	Myth and Fantasy in Roman Painting
FAH2023H	Mind and Materiality: Views from Art History and Archaeology
FAH2025H	Visual Narrative and Time in Ancient Greek and Roman Art
FAH2027H	Women and Gender in Ancient Greece
FAH2028H	Art and the Philosophy of Time
FAH2029H	The Art of Perception
FAH2034H	Topics in Roman Imperial Art
FAH2037H	Empathy, Embodiment, and Emotion in Ancient Art
FAH2038H	Greek and Roman Sculpture in the Royal Ontario Museum
FAH2060H	Artisans and Artists in the Ancient Mediterranean

Medieval

FAH1114H	Multicultural Arts of Medieval Sicily
FAH1118H	The Medieval Treasury
FAH1119H	Global Medieval Art in China
FAH1121H	12th-Century Renaissance?
FAH1125H	Medieval Pilgrimage Art and Architecture
FAH1127H	Early Medieval Art
FAH1175H	Early Islamic Architecture: 7th–10th c.
FAH1176H	History of Islamic Cairo (7th–16th c.)
FAH1177H	Building the Islamic Empire: Architecture of the Umayyads

Early Modern

FAH1202H	Correggio and the Problem of Italian Renaissance Art
FAH1204H	The Cassinese Art of Reform in Renaissance Italy
FAH1205H	Early Modern Intermediality
FAH1206H	Artistic Localities in the Early Modern World
FAH1207H	Formalism and Its Objects
FAH1221H	Inside the Painter's Studio
FAH1229H	Architecture of the Global Renaissance

FAH1231H	Northern European Sculpture 1400–1600
FAH1232H	Liquescent Art and Cultures
FAH1249H	Margaret of Austria and the Renaissance in the Netherlands
FAH1299H	Heinrich Wölfflin's Principles of Art History (1915) @ 100: A Worldwide Reception History

Modern and Contemporary

FAH1410H	Artwriting, Past and Present
FAH1411H	Art and Analogy
FAH1457H	Vernacular Photography
FAH1458H	Viewing History: The Visual Experience of the Past, 1750–1900
FAH1463H	Realisms
FAH1464H	The Recalcitrant Icon
FAH1471H	The Aesthetics of Democracy
FAH1475H	Picasso in View of Nanette
FAH1476H	Surrealism and Art
FAH1482H	The Time of Art History
FAH1486H	Bloomsbury and Vorticism
FAH1488H	The Nature of Landscape
FAH1489H	Re: Vision (Comparative Histories of the Senses)
FAH1495H	Art, Empire, Colonization
FAH1500H	Augmented Reality Art
FAH1755H	Architecture and the Project of Industrial Modernity
FAH1756H	Acoustic Space
FAH1757H	Animal Images
FAH1758H	What Images Do: Approaches From South Asia
FAH1759H	Modern Architecture and Its Representations
FAH1801H	Portraiture in Canada: 1750–1870
FAH1920H	Primitivism to Globalism: Theories of Otherness in Modern and Contemporary Arts
FAH1921H	GeoAesthetics
FAH1922H	Contemporary Art and Ethnography: Renewed Exchanges
FAH1934H	Cosmopolitan/Comparative Modernisms
FAH1935H	Contemporary Art Practices and the Modernist Archive
FAH1936H	The Retro-Modern and the Time of the Contemporary
FAH1940H	Photography and Humour
FAH1951H	Contemporary Chinese Art and its Discontents
FAH1960H	Indigenous Art, Land, and Material Relations in the Great Lakes
FAH1961H	Art and Activism

Reading Courses

FAH3000H	Special Studies in History of Art (only 1.0 FCE with this prefix is permitted in any one degree program)
FAH3011H	Readings in Ancient Art
FAH3012H	Readings in Medieval Art
FAH3013H	Readings in Renaissance and Baroque Art
FAH3014H	Readings in Modern and Contemporary Art
FAH5000Y	Comprehensive Examinations and Dissertation Topic Reading Course

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

EAS1229H	Topics in Chinese Aesthetics
EAS1339H	Topics in Chinese Art Theories
MSL2240H	The Photographic Record

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

David A. Dunlap Department of Astronomy and Astrophysics
University of Toronto
50 St. George Street
Toronto, Ontario M5S 3H4
Canada

Astronomy and Astrophysics: Graduate Faculty

Full Members

Abraham, Roberto - BSc, DPhil, FRSC ***(Chair and Graduate Chair)***
Artymowicz, Pawel - MS, PhD
Bond, J. Richard - BSc, MS, PhD, FRSC, FRS
Bovy, Jo - MMath, PhD, CRC
Carlberg, Raymond - BSc, MS, PhD
Crites, Abigail - PhD
Drout, Maria - PhD, CRC
Eadie, Gwendolyn - BS, MSc, PhD
Gaensler, Bryan - PhD, CRC ***(Director)***
Hincks, Adam - DPhil
Hlozek, Renee - PhD
Jayawardhana, Ray - BS, PhD
Lowman, Julian - BSc, MS, DPhil
Martin, Peter - BSc, MSc, PhD, FRSC, OC
Matzner, Christopher - BA, MA, PhD
Menou, Kristen - BSc, MS, ScD ***(Associate Chair, Graduate)***
Moon, Dae-Sik - BS, MS, PhD
Murray, Norman - BSc, PhD, CRC
Netterfield, C. Barth - BSc, PhD
Pen, Ue-Li - BSc, PhD
Rein, Hanno - MS, DPhil
Thompson, Christopher - BSc, PhD
Tremaine, Scott - PhD
Valencia, Diana - BS, MS, ScD
van Kerkwijk, Marten - MA, PhD
Vanderlinde, Keith - PhD
Wu, Yanqin - PhD

Members Emeriti

Lester, John - BA, MS, PhD
Yee, Howard - BASc, PhD, FRSC

Associate Members

Dubinski, John - BSc, MSc, PhD
Friesen, Rachel Katherine - PhD
Neilson, Hilding - PhD
Reid, Michael - BSc, MSc, PhD
Webb, Jeremy - PhD

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 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 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.
- Students are accepted into the PhD program following completion of a bachelor's degree, with an average in the final two years equivalent to a University of Toronto A– or better from a recognized university.
- 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 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.

Program Length

5 years

Time Limit

7 years

Astronomy and Astrophysics: Astronomy and Astrophysics MSc, PhD Courses

Preparatory Courses

AST1410H	Stars
AST1420H	Galactic Structure and Dynamics
AST1430H	Cosmology
AST1440H	Radiation Processes and Gas Dynamics

Research Courses

AST1500Y+	Directed Research
AST1501Y	Introduction to Research
AST4000Y+	Research (students register in this 4000Y series each year, beginning in Year 2, in sequence of the last digit: 2, 3, etc.)
AST4002Y+	Research
AST4003Y+	Research
AST4004Y+	Research
AST4005Y+	Research
AST4006Y+	Research

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

Elective Courses

AST2010H	Physics of Stellar Atmospheres
AST2020H	Physics of Stellar Interiors
AST2030H	Interstellar Medium and Star Formation
AST2040H	Extragalactic Astronomy
AST2050H	Observational Techniques

Specialized Courses

AST3011H	Advanced Topics in Stellar and Galactic Astronomy II
AST3020H	Advanced Topics in Interstellar Matter and Star Formation I
AST3021H	Advanced Topics in Interstellar Matter and Star Formation II
AST3030H	Advanced Topics in Extragalactic Astronomy and Cosmology I
AST3031H	Advanced Topics in Extragalactic Astronomy and Cosmology II
AST3050Y	Theoretical Cosmology
AST3100H	Lecture Series in Specialized Topics (mini courses)
AST3101H (0.25 FCE)	Specialized Topics in Astronomy and Astrophysics

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

Department of Biochemistry
University of Toronto
Room 5207, Medical Sciences Building
Toronto, Ontario M5S 1A8
Canada

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
Bazett-Jones, David - BSc, MSc, PhD
Bear, Christine - BSc, MSc, PhD
Brown, Grant - BSc, PhD
Callahan, John - BSc, MSc
Chakrabartty, 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
Houry, 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

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
Trimble, 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[0] *Seminar Course in Biochemistry Level 1* (1.0 FCE)
  - BCH2101H *Scientific Skills for Biochemists* (0.25 FCE)
  - at least 0.25 elective 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

[0] 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:
  - 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 **2.0 full-course equivalents (FCEs)** as follows:
  - BCH2022Y[0] *Seminar Course in Biochemistry Level 2* (1.0 FCE)
  - 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.
  - 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:
  - complete BCH2101H
  - be concurrently registered in BCH2022Y[0]
  - 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

[0] 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 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:
  - BCH2020Y[0] *Seminar Course in Biochemistry Level 1* (1.0 FCE)
  - BCH2022Y[0] *Seminar Course in Biochemistry Level 2* (1.0 FCE)
  - BCH2101H *Scientific Skills for Biochemists* (0.25 FCE)
  - 1.25 elective FCEs.
- To be eligible to write the **reclassification examination**, students must:
  - complete BCH2101H
  - be concurrently registered in BCH2022Y[0]
  - 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

[0] 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[0] *Seminar Course in Biochemistry Level 1* (1.0 FCE)
  - BCH2022Y[0] *Seminar Course in Biochemistry Level 2* (1.0 FCE)
  - BCH2101H *Scientific Skills for Biochemists* (0.25 FCE)
  - 1.25 elective FCEs.
- Students must successfully complete a **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[0]
  - 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

[0] 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.

BCH2020Y[0]	Seminar Course in Biochemistry Level 1 (Credit/No Credit)
BCH2022Y[0]	Seminar Course in Biochemistry Level 2 (Credit/No Credit)
BCH2024H[0]	Focused Topics in Biochemistry
JBB2025H	Protein Crystallography — Lectures
JBB2026H	Protein Structure, Folding, and Design
JBL1507H	Biochemistry of Inherited Disease
JNP1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR1444Y	Fundamentals of Neuroscience: Cellular and Molecular — Lectures (PSL444Y)[§]

Modular Courses

Each modular course is worth 0.25 full-course equivalent (FCE).

BCH2101H	Scientific Skills for Biochemists
BCH2102H	Biomolecular Dynamics and Function
BCH2103H	Current Topics in Prion Biology
BCH2104H	The Biochemistry of Translational Medicine
BCH2105H	Cystic Fibrosis: The Cause, The Treatment
BCH2106H	Membrane Proteomics in Biomedical Research
BCH2107H	Introduction to Biomolecular Simulations
BCH2109H	Engineering Vaccines: Development to Deployment
BCH2110H	Eukaryotic Signaling

BCH2111H	Post-transcriptional Control of Gene Expression
BCH2112H	From Chaperones to CRISPR-Cas: the Incredible Genius of Phages
BCH2113H	Advances in Precision Medicine
BCH2114H	Frontiers in Drug Discovery
BCH2115H	Applying Modern Evolutionary Thinking to Biochemistry, Cell, and Molecular Biology
BCH2116H	Electron Paramagnetic Resonance Spectroscopy in Modern Life Sciences
BCH2119H	Advances in Epigenetics
BCH2120H	Studies of Tissue Barriers: Regulation of Phenotype and Transport Across the Epithelium and Endothelium
BCH2121H	Lipid Metabolism in Health and Disease: Mechanisms of Diabetic Dyslipidemia in Obesity and Type 2 Diabetes
BCH2122H	The Use of High Content Screening in Biomolecular Medicine
BCH2123H	Protein Structure Prediction and Homology Modelling
BCH2124H	Molecular Chaperones and Cellular Protein Homeostasis
BCH2125H	Structure and Dynamics of Biomacromolecules Using Solid State NMR Spectroscopy
BCH2126H	Subcellular Social Networks: Inter-Organelle Contact Sites
BCH2127H	Advances in Optical Microscopy: From Single Molecules to Four-Dimensional Imaging
BCH2128H	Scientific Thinking and Practice
BCH2129H	Genome Instability: Basic Science to Human Disease
BCH2130H	Cancer Biology
BCH2131H	Genomics of Infectious Disease
BCH2132H	Modelling Human Diseases from Cells to Organoids
BCH2133H	Tyrosine Kinase Signaling
BCH2134H	Cytoskeletal Dynamics
BCH2135H	Mitochondria and Metabolism in Human Health and Disease
BCH2136H	Biological Condensates
BCH2137H	Bug v. Host
BCH2138H	Advanced Electron Microscopy
BCH2139H	Islet Biology I: Gene to Cell to Organ to Disease
BCH2140H	Islet Biology II: Beyond Glucose Control: Molecular Targets, Diagnostics and Cutting-Edge Technologies
BCH2141H	Advanced Methods in Biomolecular Interactions
BCH2200H	Design Thinking for Scientists
BCH2201H	Professional Development
BCH2202H	Intro Programming in R
BCH2203H	Intro Programming in Python
BCH2204H	Advanced Programming in R
BCH2205H	Advanced Programming in Python
BCH2206H	Interdisciplinary Science
BCH2207H	Collaborative Science: Student Centered Interdisciplinary Studies

[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.

[§] 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
Bardakjian, 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)***
Drake, James McKenzie - BSE, MSc, MBChB
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Fernie, Geoffrey - BSc, PhD
Finer, Yoav - MSc, MSc, DMD, PhD
Garton, Michael James - PhD
Gilbert, Penney - PhD
Grynpas, 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, Ofer - BSc, MSc, PhD
Matsuura, Naomi - ME, PhD
McGuigan, Alison - MEng, PhD
Mihailidis, Alex - BASc, MASc, PhD
Naguib, Hani - BSc, ME, PhD, PEng
Popovic, Milos - DipIng, PhD
Prescott, Steven - BSc, MSc, MD, PhD
Radisic, 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, MSc, 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

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

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, Taufik - 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:

- 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.

Fields:

1) Biomaterials, Tissue Engineering and Regenerative Medicine;
2) Engineering in a Clinical Setting;
3) Nanotechnology, Molecular Imaging and Systems Biology;
4) Neural/Sensory Systems and Rehabilitation

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 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); or
    - 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.

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 fulfil 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: 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).

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.

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);

- JDE1000H *Ethics in Research* (0.0 FCE);
- Health and safety training workshops.

Program Length

5 years

Time Limit

7 years

Biomedical Engineering: Biomedical Engineering PhD; Field: Clinical Engineering

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.

Field: Clinical Engineering

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 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); or
    - 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.

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 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 fulfil the PhD program requirements listed below. MHSc students who transfer to the other PhD fields must fulfil 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);
  - 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:
  - 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

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 Requirements

- **Coursework.** Students must normally complete **4.0 full-course equivalents (FCEs)** as follows:
  - BME1405H *Clinical Engineering Instrumentation I* (0.5 FCE) and BME1436H *Clinical Engineering Surgery* (0.5 FCE)
  - 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.
- Students must participate in:
  - Either BME1010H **or** BME1011H *Graduate Seminar* series (0.0 FCE) **and**
  - JDE1000H *Ethics in Research* (0.0 FCE).
- Successful completion of a **thesis**.

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.

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.

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

AER1604H,
APS1034H, APS1039H, APS1040H, APS1101H,
BME1480H, 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.

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.

BME1010H	Graduate Seminar
BME1011H	Graduate Seminar
BME1405H	Clinical Engineering Instrumentation I
BME1436H	Clinical Engineering Surgery
BME1439H	Clinical Engineering Instrumentation II
BME1453H	Genomics and Synthetic Nucleic-Acid Technologies
BME1454H	Regenerative Medicine: Fundamentals and Applications
BME1457H	Biomedical Nanotechnology
BME1459H	Protein Engineering
BME1460H	Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging
BME1462H	Biological Image Analysis
BME1466H	Advanced Topics on Magnetic Resonance Imaging
BME1471H	Rehabilitation Engineering
BME1472H	Fundamentals of Neuromodulation Technology and Clinical Applications
BME1473H	Acquisition and Processing of Bioelectric Signals
BME1477H	Biomedical Engineering Project Design and Execution
BME1478H	Coding for Biomedical Engineers
BME1479H	Statistical Discovery Techniques for Biomedical Researchers

BME1500H	Topics in Neuromodulation
BME1480H	Experimental Design and Multivariate Analysis in Bioengineering
BME1800H	Biomedical Product Development I
BME1801H	Biomedical Product Development II
BME1802H	Biomedical Devices — Human Factors
BME1898Y	Practical Experience in Applied Research PT
BME1899Y	Practical Experience in Applied Research FT
BME4444Y	Practical Experience Course
APS1043H	Writing Your Own Patent Application
CHE1334H	Organ-on-a-Chip Engineering
JCB1349H	Molecular Assemblies: Structure/Function/Properties
JEB1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB1433H	Medical Imaging
JEB1444H	Neural Engineering
JEB1447H	Sensory Communications
JMB1050H	Biological and Bio-inspired Materials
BME/JPB1022H	Human Physiology as Related to Engineering II
JPB1071H	Advanced Topics: Computational Neuroscience
JTC1331H	Biomaterials Science

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

Web: csb.utoronto.ca
Email: grad.csb@utoronto.ca
Telephone: (416) 978-3477
Fax: (416) 978-8532

Department of Cell and Systems Biology
University of Toronto
Ramsay Wright Building
Room 424, 25 Harbord Street
Toronto, Ontario M5S 3G5
Canada

Cell and Systems Biology: Graduate Faculty

Full Members

AbouHaidar, Mounir - DipdESup, BSc, PhD, CAP
Arruda Carvalho, Maithe - BSc, MSc, PhD
Berleth, Thomas - BSc, MSc, PhD
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
Erclik, Teddy - BSc, PhD
Espie, George - PhD
Fernandez-Gonzalez, Rodrigo - BSc, PhD
Filion, Guillaume - BA, MA
Gazzarrini, Sonia - BA, PhD
Gerlai, Robert - MSc, PhD
Gilbert, Penney - PhD
Godt, Dorothea - MS, DrRerNat
Gonzales-Vigil, Eliana - BS, PhD
Goring, Daphne - PhD
Guttman, 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
Ringuette, Maurice - BSc, PhD
Senatore, Adriano - BSc, MSc, PhD
Sokolowski, Marla - BSc, PhD, CRC
Stephenson, Richard - BSc, PhD
Stewart, Bryan - BSc, MS, DPhil
Takehara, Kaori - BSc, MSc, PhD
Tepass, Ulrich - MSc, PhD, CRC, FRSC
Terebiznik, Mauricio - BSc, PhD
Thiele, Tod - BS, PhD
Treanor, Bebhinn Lucy - BSc, PhD
Tropepe, Vince - BSc, PhD
Vanlerberghe, 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:
  - 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.
- 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.

CSB1010Y[0]	MSc Seminar Series
CSB1011Y[0]	PhD Seminar Series
CSB1018H	Advanced Microscopy and Imaging
CSB1020H	Topics in Cell and Systems Biology
CSB1025H	Methods in Genomics and Proteomics
CSB1472H	Computational Genomics and Bioinformatics
CSB1482H	Readings in Genome Biology and Bioinformatics

[0] Course that continues over a program. The course is graded when completed.

Chemical Engineering and Applied Chemistry

Chemical Engineering and Applied Chemistry: Introduction

Faculty Affiliation

Applied Science and Engineering

Degree Programs

Chemical Engineering and Applied Chemistry

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

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 Geoscience (Specialist), Honours BSc / Chemical Engineering and Applied Chemistry, MEng
- UTSC, Environmental Geoscience (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
  - Chemical Engineering and Applied Chemistry, MASc, PhD
- Cardiovascular Sciences
  - Chemical Engineering and Applied Chemistry, MASc, PhD
- Engineering Education
  - Chemical Engineering and Applied Chemistry, MASc, PhD
- Environmental Studies
  - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
- Environment and Health
  - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
- Genome Biology and Bioinformatics
  - Chemical Engineering and Applied Chemistry, PhD
- Global Health (U of T Global Scholar)
  - Chemical Engineering and Applied Chemistry, MASc, MEng, PhD
- Next-Generation Precision Medicine
  - 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
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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
Kawaji, 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 - DipIng, 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, Vladimiros - MEng, PhD
Radisic, Milica - BEng, PhD
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
Gavazza, Savia - BSc, PhD
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[0] *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

[0] *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

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

Time Limit

3 years

*** Students may begin the program at different times.*

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

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 (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 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 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,
MIE506H, 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*
    - 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* (for example, Water Sanitation and Hygiene; Treatment Wetlands; the topic is subject to obtaining approval from the student's graduate unit)
- CIV1499H *Special Studies in Civil Engineering*
- JCC1313H *Environmental Microbiology*
- JNC2503H *Environmental Pathways*
- MIE1807H *Principles of Measurements*
- STA1004H *Introduction to Experimental Design.*

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

APS502H, APS1005H, APS1017H, APS1022H, APS1040H, APS1050H, APS1051H, APS1052H, APS1053H, APS1080H, CHE507H, CHE1108H, CHE1148H, CHE1434H, CIV1504H, CIV1506H, CIV1507H, CIV1532H, CIV1538H, ECE537H, ECE1504H (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1513H), ECE1505H, ECE1510H, ECE1657H, 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 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, 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.

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

AER1604H,
APS1034H, APS1039H, APS1040H, APS1101H,
BME1800H, BME1801H, BME1802H, BME1480H,
CHE561H, CHE568H, CHE1213H, CHE1431H, CHE1432H, CHE1434H, CHE1436H,
CIV510H, CIV518H, CIV1163H, CIV1171H, CIV1174H, CIV1190H, CIV1201H, CIV1279H, CIV1282H, CIV1422H, CIV1429H,
JMB1050H,
JNC2503H,
MIE507H, MIE533H, MIE1301H, MIE1303H, MIE1411H, MIE1414H, MIE1616H, MIE17108H, MIE1713H, MIE1714H, MIE1721H, MIE1723H, MIE1727H, MIE1804H,
MSE1015H, MSE1016H, MSE1022H, MSE1032H, MSE1067H.

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, MIE517H, MIE1128H, 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.

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

CHE1100H	Fundamentals of Chemical Engineering
CHE1107H	Applied Mathematics
CHE1141H	Advanced Chemical Reaction Engineering
CHE1142H	Applied Chemical Thermodynamics
CHE1143H	Transport Phenomena
CHE1310H	Chemical Properties of Polymers
JTC1134H	Applied Surface and Interface Science
JTC1135H	Applied Surface Chemistry

Category B: Specialized Courses

APS502H	Financial Engineering
APS510H	Innovative Technologies and Organizations in Global Energy Systems
APS530H	Appropriate Technology and Design for Global Development
APS1001H	Project Management
APS1004H	Human Resource Management: An Engineering Perspective
APS1005H	Operations Research for Engineering Management
APS1009H	Natural Resources Management
APS1012H	Managing Business Innovation and Transformational Change
APS1013H	Applying Innovation in Engineering and Business Operations
APS1015H	Social Entrepreneurship
APS1016H	Financial Management for Engineers
APS1017H	Supply Chain Management and Logistics
APS1018H	The Engineer in Society — Ethics, History, and Philosophy
APS1020H	International Business for Engineers
APS1022H	Financial Engineering II
APS1023H	New Production Innovation
APS1024H	Infrastructure Resilience Planning
APS1025H	Infrastructure Protection
APS1028H	Operations and Production Management for Manufacturing and Services
APS1031H	Infrastructure Planning
APS1032H	Introduction to Energy Project Management
APS1033H	Business Innovation Leading to the Future, Based on Imagineering
APS1034H	Making Sense of Accidents
APS1035H	Technology Sales for Entrepreneurs
APS1036H	Formative Experiential Entrepreneurial Learning (FEEL)
APS1043H	Writing Your Own Patent Application
APS1070H	Foundations of Data Analytics and Machine Learning
APS1088H	Entrepreneurship and Business for Engineers
APS1201H	Topics in Engineering and Public Policy 500-Level (undergraduate/graduate) Courses
APS1420H	Technology, Engineering, and Global Development
APS5500H	Research Methods and Project Execution for Graduate Student Success (exclusion: CHE1102H)
CHE507H	Process Modelling and Simulation
CHE553H	Electrochemistry
CHE561H	Risk Based Safety Management
CHE564H	Pulp and Paper Processes
CHE565H	Aqueous Process Engineering
CHE568H	Nuclear Engineering
CHE575H	Mechanical Properties of Bio-Composites and Biomaterials
CHE1053H	Electrochemistry
CHE1108H	Numerical Methods in Chemical Engineering
CHE1123H	Liquid Biofuels
CHE1125H	Modelling and Optimization of Chemical and Biomedical Networks
CHE1133H	Bioprocess Engineering (prerequisite: JCC1313H or equivalent)
CHE1134H	Advances in Bioengineering
CHE1135H	Regulatory Affairs for Industrial Biotechnology and Biopharmaceutical Products
CHE1147H	Data Mining in Engineering
CHE1148H	Process Data Analytics
CHE1150H	Industrial Water Technology
CHE1151H	Engineering Systems Sustainability

CHE1213H	Corrosion
CHE1333H	Biomaterials Engineering for Nanomedicine
CHE1334H	Organ-on-a-Chip Engineering
CHE1430H	Hydrometallurgy, Theory, and Practice (MEng only)
CHE1431H	Environmental Auditing (MEng only)
CHE1432H	Technical Aspects of Environmental Regulations (MEng only)
CHE1433H	Air Dispersion Modelling
CHE1434H	Six Sigma for Chemical Processes
CHE1435H	Fundamentals of Aerosol Physics and Chemistry
CHE1475H	Biocomposite Materials
JCB1349H	Molecular Assemblies: Structure/Function/Properties
JCC1313H	Environmental Microbiology
JCR1000Y	An Interdisciplinary Approach to Addressing Global Challenges
JNC2503H	Environmental Pathways
JTC1331H	Biomaterials Science
TEP1010H	Cognitive and Psychological Foundations of Effective Leadership
TEP1011H	Authentic Leadership: Engineering a Vibrant Future
TEP1026H	Positive Psychology for Engineers
TEP1027H	Engineering Presentations
TEP1029H	The Science of Emotional Intelligence and its Application to Leadership
TEP1030H	Engineering Careers — Theories and Strategies to Manage Your Career for the Future
TEP1501H	Leadership and Leading in Groups and Organizations
TEP1502H	Leadership in Product Design

In addition to the above courses, students may elect to take courses in other engineering or science departments where such courses are deemed relevant to the area of study. These courses require prior approval from the Graduate Coordinator.

MASc and PhD Seminar Courses

CHE1102H	Research Methods and Project Execution
CHE3001H[0]	Leading Edge Seminar Series in Chemical Engineering and Applied Chemistry

[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

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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

Seferos, Dwight - BCh, DChem
Segal, Dvira - BSc, DSc
Sherwood Lollar, Barbara - PhD
Shin, Jumi - AB, DPhil
Shoichet, Molly - PhD
Simpson, Andre - BSc, PhD
Simpson, Myrna - BS, DPhil
Song, Datong - BSc, PhD
Stephan, Douglas - BSc, PhD
Taylor, Mark - BSc, DSc
Thompson, Michael - BSc, PhD, DSc, FRSC
Tran, Helen - PhD
Voznyy, Oleksandr - BSc, MSc, PhD
Walker, Gilbert - BCh, PhD
Wania, Frank - MPH, PhD
Wheeler, Aaron - BS, PhD
Whittington, Stuart - BA, MA, PhD
Wilson, Mark - PhD
Winnik, Mitchell - BA, PhD
Woolley, G Andrew - PhD
Yudin, Andrei - BS, PhD
Zhang, Xiaoan - MS, 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.
- Students must participate in a **seminar** program. Attendance and presentation of a seminar are mandatory in order to receive the credit.
- 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).
- Submission of a **thesis**.

Program Length

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

Time Limit

3 years full-time

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.
- 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

CHM3000H	Graduate Professional Development for Research and Teaching in Chemistry (Credit/No Credit)

Analytical Chemistry

CHM1102H	Biosensors and Chemical Sensors
CHM1103H	Advanced Topics in Analytical Chemistry
CHM1104H	Separation Science
CHM1105H	Separations, Chromatography, and Microfluidics
CHM1106H	Lab Instrumentation
CHM1107H	The -Omics Revolution and Mass Spectrometry
CHM1150H	Advances in Electroanalytical Chemistry and Electrochemical Sensors
CHM1152H	Chemical Sensors
CHM1190Y	Analytical Chemistry Seminar (Credit/No Credit)
CHM1410H	Analytical Environmental Chemistry
CHM2014H	Research in Analytical Chemistry

Environmental Chemistry

CHM1401H	Transport and Fate of Chemical Species in the Environment
CHM1404H	Molecular Analysis of Natural Systems
CHM1410H	Analytical Environmental Chemistry
CHM1415H	Atmospheric Chemistry
CHM1420H	Environmental Chemistry of Soil
CHM1425H	Modelling the Fate of Organic Chemicals in the Environment
CHM1430H	Advanced Topics in Atmospheric Chemistry
CHM1590Y	Environmental Chemistry Seminar (Credit/No Credit)
CHM2534H	Research in Environmental Chemistry
EES1105H	Soil Contamination Chemistry

Inorganic Chemistry

CHM1204H	Organometallic Chemistry and Catalysis
CHM1205H	Inorganic Reaction Mechanisms
CHM1206H	Solid State Chemistry: Structure-Property Relations
CHM1255H	Supramolecular Chemistry
CHM1258H	Reactions of Coordinated Ligands
CHM1263H	Bio-inorganic Chemistry
CHM1268H	X-Ray Crystallography
CHM1269H	Nanochemistry: A Chemistry Approach to Nanomaterials
CHM1270H	Frontiers in Inorganic Chemistry (core course)
CHM1290Y	Inorganic Chemistry Seminar (Credit/No Credit)
CHM2034H	Research in Inorganic Chemistry

Organic and Biological Chemistry

CHM1003H	Physical Organic Chemistry II
CHM1004H	Synthetic Organic Chemistry
CHM1005H	Applications of Spectroscopy in Organic Structure Determination
CHM1006H	Bioorganic Chemistry
CHM1008H	Biological Chemistry
CHM1040H	Modern Organic Synthesis
CHM1045H	Modern Physical Organic Chemistry
CHM1051H	Current Topics in Chemical Biology
CHM1054H	Topics in Bio-organic Chemistry
CHM1056H	Techniques for Studying the Chemical, Structural, and Dynamic Properties of Biomolecules
CHM1057H	Topics in Synthetic Organic Chemistry
CHM1059H	Chemical Biology in Complex Systems
CHM1060H	Advanced Topics in Synthetic Organic Chemistry
CHM1068H	Topics in Biological and Medicinal Chemistry
CHM1090Y	Organic Chemistry Seminar (Credit/No Credit)
CHM2044H	Research in Organic Chemistry

Physical and Theoretical Chemistry

CHM1441H	Mathematical Methods
CHM1443H	Intermediate Quantum Mechanics
CHM1446H	Quantum Computation and Information Theory
CHM1448H	Modelling of Biochemical Systems
CHM1450H	Nanoscale Characterization with Scan Probe Microscopy
CHM1455H	NMR Spectroscopy I: Basic Theory and Applications for Biological Chemists
CHM1456H	NMR Spectroscopy II: Advanced Theory and Application
CHM1464H	Topics in Statistical Mechanics
CHM1478H	Quantum Mechanics for Physical Chemists (core course)
CHM1480H	Basic Statistical Mechanics (core course)
CHM1481H	Reaction Kinetics and Dynamics
CHM1482H	Laser Spectroscopy and Photophysics
CHM1490Y	Physical Chemistry Seminar (Credit/No Credit)
CHM2024H	Research in Physical Chemistry

Polymers and Materials Chemistry

CHM1206H	Solid State Chemistry: Structure-Property Relations
CHM1300H	Polymer Chemistry
CHM1301H	Organic and Inorganic Polymer Synthesis
CHM1302H	Physical Chemistry of Polymers
CHM1304H	Organic Materials Chemistry
CHM1390Y	Polymer and Materials Chemistry Seminar (Credit/No Credit)
CHM2304H	Research in Polymer and Materials Chemistry

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, 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, 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

Cramer, Lauren - AB, MA, DFA
Jacobson, Brian - PhD
Saljoughi, Sara - BA, MA, PhD
Testa, Bart - BA, MA
Wijaya, Elizabeth - BA, MA, MA, PhD
Zambenedetti, Alberto - MA, PhD

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

CIN1101H	Theories and Practices of Cinema
CIN1102H	Key Developments in Film History

Plus one of:

CIN1006Y	Major Research Paper in Cinema Studies
CIN1007Y	Internship in Cinema Studies

PhD Core Courses

CIN2100H	History and Historiography of Cinematic Media
CIN2101H	Pressures on the Cinematic
CIN2999H	Research Seminar in Cinema Studies (Credit/No Credit)

Elective Courses (Subject to Change)

CIN1005H	Special Studies in Cinema
CIN1008H	Independent Research and Reading in Cinema Studies
CIN1011H	Colour and the Moving Image
CIN1100H	The Textual Object
CIN1772H	The Politics of Non-Fiction Film
CIN3002H	Cinema and Nation
CIN3004H	Documentary and Non-fiction Media
CIN3006H	Media and Philosophy
CIN3008H	Topics in Film and Media History
CIN3010H	Topics in Film and Media Theory
CIN6153H	Race and Cinema
CIN6803H	Intertextuality in Feminist Cinema: The Counter-Cinematic Impulse
JFF1100H	Surrealism and French Cinema
JFF1101H	The Art of Exploration: How to Think the World

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
- UTSC, Environmental Geoscience (Specialist), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Geoscience (Specialist Co-op), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Physics (Specialist), Honours BSc / Civil Engineering, Meng
- UTSC, Environmental Physics (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).

Student Services Inquiries

Colleen Kelly
Email: civ.gradprograms@utoronto.ca
Telephone: (416) 978-5904

Department of Civil and Mineral Engineering
University of Toronto
Galbraith Building 35 St. George Street, Room 116
Toronto, Ontario M5S 1A4
Canada

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, MSc, 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
Hatzopoulou, 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, MEc, MBA, MASc, PhD, PEng
Kwon, Oh-Sung - BS, MS, MS, PhD, PEng
MacLean, Heather L. - BASc, MASc, MBA, PhD, PEng
McCabe, Brenda - BSc, 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 - DipIng, 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 Emphases 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 Emphases 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–).

- 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 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

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* (for example, Water Sanitation and Hygiene; Treatment Wetlands; the topic is subject to obtaining approval from the student's graduate unit)
  - CIV1499H *Special Studies in Civil Engineering* (for example, Fundamentals of Acid Mine Drainage; the topic is subject to obtaining approval from the student's graduate unit).
  - JCC1313H *Environmental Microbiology*
  - JNC2503H *Environmental Pathways*
  - MIE1807H *Principles of Measurements*
  - STA1004H *Introduction to Experimental Design.*

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

APS502H, APS1005H, APS1017H, APS1022H, APS1040H, APS1050H, APS1051H, APS1052H, APS1053H, APS1080H, CHE507H, CHE1108H, CHE1148H, CHE1434H, CIV1504H, CIV1506H, CIV1507H, CIV1532H, CIV1538H ECE537H, ECE1504H (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1513H), ECE1505H, ECE1510H, ECE1657H, ECE1778H, ECE1779H
MIE562H, MIE1413H, MIE1501H, MIE1512H, MIE1513H, MIE1517H, MIE1620H, MIE1621H, MIE1622H, MIE1623H, MIE1628H, MIE1653H, MIE1721H, MIE1723H, MIE1727H
MSE1063H (exclusion: MSE1065H).

Emphasis: Building Science (MEng only)

MEng students must successfully complete at least **six half courses (3.0 full-course equivalents [FCEs])** with a combination of core and elective courses as detailed below. One or two of the optional courses 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):

CIV514H, CIV536H, CIV577H, CIV1279H, CIV1299H, MIE515H, MIE1240H.

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, CIV1262H, CIV1275H, CIV1504H.

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.

APS1001H, APS1004H, APS1005H, APS1017H, CIV1279H, CIV1281H, CIV1299H, CIV1307H, CIV1504H, MIE562H, MIE1413H.

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

Engineering and Society

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

Emphasis: Environmental 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 Environmental Engineering emphasis coordinator.

CHE1134H, CHE1150H, CHE1180H, CHE1431H, CHE1432H, CHL5903H,
CIV541H, CIV549H, CIV550H, CIV577H, CIV1303H, CIV1307H, CIV1308H, CIV1311H, CIV1319H, CIV1320H, CIV1399H, ENV1001H, ENV1701H,
JCC1313H,
JNC2503H,
MIE1240H.

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, APS1039H, APS1040H, APS1101H,
BME1480H, 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

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, MIE517H, MIE1128H, MIE1129H, MIE1130H, MIE1240H, 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: 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.

APS510H, APS1024H, APS1025H,
CIV514H, CIV516H, CIV531H, CIV575H, CIV576H, CIV577H, CIV1201H, CIV1252H, CIV1280H, CIV1303H, CIV1307H, CIV1535H,
ECE1092H,
ENV1001H,
MIE515H, MIE1120H, MIE1240H, MIE1715H.

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

CIV1201H	Concrete Technology and Non-Destructive Testing Principles
CIV1240H	Building Performance Assessment (prerequisite: CIV375, CIV575, or instructor approval)
CIV1250H	Instrumentation Techniques in Concrete Technology
CIV1252H	Repair and Maintenance of Concrete Structures
CIV1260H	Chemistry of Cements and Concrete (prerequisite: CIV514H)
CIV1262H	Microscopy Applied to Concrete and Geomaterials
CIV1275H	Construction Modeling Methods
CIV1278H	Pre-Project Planning and Constructability Analysis
CIV1279H	Construction Contract Documents
CIV1280H	Building Envelope Design
CIV1281H	Asset Management
CIV1282H	Case Studies in Building Science
CIV1298H	Special Studies in Civil Engineering
CIV1299H	Special Studies in Civil Engineering

Environmental Engineering

CIV541H	Environmental Biotechnology
CIV549H	Groundwater Flow and Contamination
CIV550H	Water Resources Engineering
CIV1302H	Low Impact Development and Stormwater Systems
CIV1303H	Water Resources Systems Modelling
CIV1307H	Life Cycle Assessment of Engineering Activities
CIV1308H	Physical and Chemical Treatment Processes
CIV1309H	Biological Treatment Processes
CIV1311H	Advanced and Sustainable Drinking Water Treatment
CIV1319H	Chemistry and Analysis of Water and Wastes
CIV1320H	Indoor Air Quality
CIV1321H	Large Scale Infrastructure and Sustainability
CIV1330H	Water, Sanitation, Hygiene, and Global Health
CIV1399H	Special Studies in Civil Engineering

Geomechanics

CIV521H	Rock Mechanics
CIV523H	Geotechnical Design
CIV1404H	Material Fracture Dynamics: Experimental Methods
CIV1420H	Soil Properties and Behaviour
CIV1421H	Continuum Mechanics of Fluids and Solids
CIV1422H	Dynamic Response of Engineering Materials
CIV1429H	Advanced Rock Engineering: Rock Engineering in Fractured Rock Masses
CIV1430H	Engineering Rock Mechanics
CIV1499H	Special Studies in Civil Engineering
CME500H	Fundamentals of Acid Rock Drainage
MIN511H	Integrated Mine Waste Engineering
MIN540H	Borehole Geophysics for Engineers and Geoscientists
MIN565H	Design and Support of Underground Mine Excavations

Structural Engineering

CIV510H	Solid Mechanics II
CIV514H	Concrete Technology
CIV515H	Introduction to Structural Dynamics
CIV517H	Prestressed Concrete Structures
CIV518H	Behaviour and Design of Steel Structures
CIV519H	Structural Analysis II
CIV1163H	Mechanics of Reinforced Concrete
CIV1164H	Bridge Engineering
CIV1167H	Advanced Structural Dynamics
CIV1169H	Advanced Topics in Building Design
CIV1171H	Earthquake Engineering and Seismic Design
CIV1174H	Finite Element Methods in Structural Mechanics
CIV1175H	Design of Tubular Steel Structures
CIV1180H	Advanced Modeling Methods for Seismic Performance Assessment of Structures
CIV1190H	Structures Under Blast and Impact
CIV1199H	Special Studies in Civil Engineering
CIV1361H	Reinforced and Prestressed Concrete Structures

Transportation Engineering and Planning

CIV516H	Public Transit Operations and Planning
CIV531H	Transport III — Planning
CIV1505H	Transportation Research Seminar
CIV1506H	Freight Transportation and ITS Applications
CIV1507H	Public Transport
CIV1508H	Airport Planning and Engineering
CIV1532H	Fundamentals of ITS and Traffic Management
CIV1535H	Transportation and Development
CIV1536H	Modelling Transport Emissions
CIV1538H	Transportation Demand Analysis
CIV1599H	Special Studies in Civil Engineering

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

CEM1001H	The Challenges of Urban Policy-Making
CEM1002H	Empirical Study of Cities
CEM1003H	Infrastructure and Urban Prosperity
CEM1004H	Cities as Complex Systems
CEM1000Y	Cities Engineering and Management Practicum

Infrastructure Engineering Course Electives

Students must choose three courses in one of the following specialization areas: Cyber Security, Communications Networks, Environmental Issues for Healthy Cities, Operations Research, Resilience of Critical Infrastructure, Sustainable Energy Systems, Transportation, Urban Structures.

The course selection (subject to change) in each infrastructure engineering specialization area is:

Cybersecurity

ECE568H	Computer Security Planning
ECE1508H	Special Topics in Communications
ECE1518H	Seminar in Identity, Privacy, and Security
ECE1776H	Computer Security, Cryptography, and Privacy

Communications Networks

ECE1508H	Special Topics in Communications
ECE1520H	Data Communications I
ECE1524H	Service Provider Networks
ECE1541H	Communication Networks I
ECE1545H	Bridges and Routers Planning
ECE1548H	Advanced Network Architectures

Environmental Issues for Health Cities

CHE1433H	Air Dispersion Modelling
CIV549H	Groundwater Flow and Contamination
CIV1303H	Water Resources Systems Modelling
CIV1308H	Physical and Chemical Treatment Processes
CIV1309H	Biological Treatment Processes
CIV1311H	Advanced and Sustainable Drinking Water Treatment
CIV1330H	Water, Sanitation, Hygiene, and Global Health

Operations Research

MIE1603H	Integer Programming
MIE1616H	Research Topics in Healthcare Engineering
MIE1620H	Linear Programming and Network Flows
MIE1621H	Non-Linear Optimization
MIE1721H	Reliability
MIE1723H	Engineering Asset Management
MIE1727H	Quality Assurance I

Resilience of Critical Infrastructure

APS1024H	Infrastructure Resilience Planning
APS1025H	Infrastructure Protection
APS1031H	Infrastructure Planning
URD1044H	Urban Design and Development
URD2041H	Business and Land Use Planning in Real Estate Development

Sustainable Energy Systems

APS510H	Innovative Technologies and Organizations in Global Energy Systems
ECE1092H	Smart Grid Case Studies
MIE515H	Alternative Energy Systems
MIE1120H	Current Energy Infrastructure and Resources
MIE1240H	Wind Power
MIE1715H	Life Cycle Engineering

Transportation

CIV516H	Public Transit Operations and Planning
CIV531H	Transport III — Planning
CIV1506H	Freight Transportation and ITS Applications
CIV1508H	Airport Planning and Engineering
CIV1532H	Fundamentals of ITS and Traffic Management
CIV1535H	Transportation and Development
CIV1538H	Transportation Demand Analysis
CIV1598H	Special Studies in Civil Engineering — Transportation: Urban Operations Research

Urban Structures

APS1024H	Infrastructure Resilience Planning
APS1025H	Infrastructure Protection
CIV576H	Sustainable Buildings
CIV1164H	Bridge Engineering
CIV1167H	Advanced Structural Dynamics
CIV1169H	Advanced Topics in Building Design
CIV1252H	Repair and Maintenance of Concrete Structures

Technology Management Course Electives

The course list is subject to change.

APS1001H	Project Management
APS1005H	Operations Research for Engineering Management
APS1009H	Natural Resources Management
APS1012H	Managing Business Innovation and Transformational Change
APS1015H	Social Entrepreneurship
APS1016H	Financial Management for Engineers
APS1017H	Supply Chain Management and Logistics
APS1024H	Infrastructure Resilience Planning
APS1025H	Infrastructure Protection
APS1031H	Infrastructure Planning
APS1036H	Formative Experiential Entrepreneurial Learning (FEEL)
APS1037H	Infrastructure Engineering in Remote First Nation Communities in Ontario
APS1038H	Strategic Sustainability Management for Businesses and Products
APS1039H	Enterprise Risk Management
APS1040H	Quality Control for Engineering Management
APS1088H	Business Planning and Execution for Canadian Entrepreneurs
APS1202H	Engineering and Sustainable Development
CHE1435H	Fundamentals of Aerosol Physics and Chemistry
CIV1307H	Life Cycle Assessment and Sustainability of Engineering Activities
TEP1010H	Cognitive and Psychological Foundations of Effective Leadership

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

Department of Classics
University of Toronto
125 Queen's Park
Toronto, Ontario M5S 2C7
Canada

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, PhD
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+, **or by**
    - 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 (SRD4444Y^0 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** (CLA4000Y^0). 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 A– for their MA degree, or who have a comparable achievement, need 8 seminars with an A– average.
- Satisfactory participation for at least two years in the seminar series for the student's field (SRD4444Y[0] 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 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 four-year PhD program, but passing the exams at an earlier stage is advisable. 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 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 (CLA4000Y[0]). 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

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[0] 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[0]). 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

[0] 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.

AMP2000Y[0]	Collaborative Specialization in Ancient and Medieval Philosophy (CSAMP) Proseminar
CLA2000Y	Graduate Research Paper
CLA3020H	Research Methods in Ancient History
CLA3200Y	Work in Progress in Ancient History
CLA4000Y[0]	Major Field
GRK1000H	Advanced Studies in Greek Language (Credit/No Credit)
GRK1800H	Special Topics in Greek Literature
GRK1801H	Special Topics in Greek History
GRK1810H	Classical Greek Literature and Culture
GRK1811H	Hellenistic Literature and Culture
GRK2505Y[0]	Greek Sight Exam
JCO5121H	Classics and Theory
LAT1000H	Advanced Studies in Latin Language (Credit/No Credit)

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[0]	Latin Sight Exam
SRD4444Y[0]	Ancient History Seminar/Literature Seminar

[0] 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.

CLA5000H	Early Greek Epic
CLA5004H	Studies in Greek Poetry
CLA5007H	Criticism of Latin Poetry
CLA5009H	Literature of the Roman Republic
CLA5010H	Virgil
CLA5012H	Studies in Ancient Philosophy I
CLA5013H	Studies in Ancient Science
CLA5015H	Latin Poetry of the Empire
CLA5016H	Topics in Greek and Hellenistic History
CLA5018H	Topics in Roman History
CLA5020H	Studies in Ancient Philosophy II
CLA5021H	Topics in the Study of Greek and Hellenistic Literature and Culture
CLA5022H	Topics in the Study of Greek and Hellenistic Society
CLA5023H	Topics in the Study of Roman Literature and Culture
CLA5024H	Topics in the Study of Roman Society
CLA5025H	Topics in Greek and Hellenistic History II
CLA5026H	Topics in Graeco-Roman Historiography I
CLA5027H	Topics in Graeco-Roman Historiography II
CLA5028H	Topics in Graeco-Roman History I
CLA5029H	Topics in Graeco-Roman History II
JMT1000H	Andronicus of Rhodes and the Early Peripatos
JMT1002H	Augustine: Soliloquia

Directed Reading

CLA1300Y	Studies in Classical Antiquity
CLA1301H	Studies in Classical Antiquity
CLA1303H	Studies in Classical Antiquity
CLA1305H	Studies in Classical Latin
CLA1306H	Studies in Greek Literature I
CLA1308H	Studies in Latin Literature I
CLA1309H	Studies in Latin Literature II

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

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University of Toronto
Isabel Bader Theatre
3rd Floor, 93 Charles Street West
Toronto, Ontario M5S 1K9
Canada

Comparative Literature: Graduate Faculty

Full Members

Bahoora, 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
Driscoll, Kari - MA, PhD
Esterhammer, Angela - BA, PhD
Fernandez, David Andres - BA, MLS
Goetschel, Willi - PhD

Gould, Rebecca Ruth - BA, PhD
Gunderson, Erik - BA, MA, PhD
Hewitt, Marsha - BA, MA, PhD
Holland, Kate - MA, PhD
Keith, Alison - BA, MA, PhD, FRSC
Keshavmurthy, Prashant - PhD
Leonard, Garry - BA, MA, PhD
Linkletter, Michael - MA, PhD
Matus, Jill - BA, MA, PhD
Meng, Yue - BA, MA, MA, PhD
Motsch, Andreas - PhD
Noyes, John - BA, MA, PhD
Paterson, Janet - BA, MA, PhD
Revermann, Martin - PhD
Robins, William - BA, MPH, PhD
Seidman, Naomi - PhD
Somigli, Luca - PhD
Stern, Simon - BA, PhD, JD, Chair in Electronic Commerce
Trojanowska, Tamara - MA, PhD
Wohl, Victoria - BA, MA, 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 varieties 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.

COL1000H	Faculty Seminar
COL1900H	Reading and Research for the MA
COL2100H	Special Topics Course
COL4000Y	Practicum on Research and Bibliography in Comparative Literature
COL5012H	How Aesthetics was Made a Science: Readings in Czech and Russian
COL5016H	Dramatic Text and Theoretical Communication: Bertolt Brecht, Robert Lepage, and Robert Wilson
COL5018H	Gender and Agency
COL5027H	Memory, Trauma, and History
COL5032H	Feminist Approaches to Medieval Literature
COL5033H	Visual Portraitures in Contemporary Autobiographical Narratives
COL5037H	Magic Prague: Questions of Literary Cityspaces
COL5047H	The Two Avant-Gardes
COL5052H	Marxism and Form
COL5062H	Prague School Semiotics of Drama, Theater, and Cinema in Contemporary Context
COL5072H	Affinities: Readings of Realism and Radicalism
COL5081H	Benjamin's Arcades Project
COL5086H	Literature, Culture, and Contact in Medieval Iberia
COL5090H	Introduction to Visual Culture
COL5094H	Forms of Critical Writing
COL5095H	Giorgio Agamben: Exception and Potentiality
COL5096H	The Problem of Translation: Historical, Theoretical, and Pragmatic Perspectives
COL5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates
COL5109H	Jean-Luc Nancy: Retreating the Aesthetic
COL5110H	Post-Capitalist Fantasy: Culture, Politics, Subjectivity
COL5114H	Destruction of Images
COL5117H	Freud and Psychoanalysis
COL5118H	Sovereignty: Hobbes and his 21st-Century Successors
COL5119H	Girls and Sex in the 21st Century
COL5122H	Text and Digital Media
COL5123H	Converting to Digital Humanities
COL5124H	Public Reading: Literature and the Formation of Critical Publics
COL5125H	Literature, Trauma, Modernity
COL5126H	Sports Narrated: Literary and Interdisciplinary Explorations
COL5127H	Queer Ethics and Aesthetics of Existence
COL5128H	Tragedy: Instantiations of a Dramatic Form in Theatre, Philosophy, Opera, and Popular Cinema
COL5129H	New Addictions for the Anthropocene
COL5130H	Comparison and "the Human"
COL5131H	Non Disclosure Acts
COL5132H	One Philosopher and One Artist: Towards a New Practice of Comparison
COL5133H	Comparative Modernisms
COL5135H	Climate Genres
COL5136H	Aesthetics of Space, Place, and Power
COL5137H	Paraliterary Practices and Dialogic Creativity
COL5138H	Dramaturgy of the Dialectic
COL5139H	Critical Race Theory
COL5140H	Beckett and Philosophy
COL5141H	Beyond the Anthropocene: New Directions in Environmental Humanities
COL5145H	Poetics of Personhood
COL5142H	Women and Sex and Talk
JCD5135H	Race, Politics, and Jewishness
JCD5136H	Migration and Memory: Narratives of Jewish Exile and Displacement
JCO5121H	Classics and Theory Seminar
JFC5025H	Feminism and Postmodernism: Theory and Practice
JFC5105H	Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500–1800)
JFC5129H	Performative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials
JFC5136H	Allegory and Allegorism in Literature and Fine Arts
JGC1855H	Critical Theory in Context: The French-German Connection

JHL1282H	Comparative Totalitarian Culture
JHL1680H	Revolutionary Women's Cultures in East Asia, Early to Mid 20th Century
JLE5225H	The Passage from History to Fiction
JLV5134H	Theories of the Novel
JOS5019H	Cervantes and Renaissance Humanism
JOS5029H	Reading Cervantes

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, 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
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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, Fahiem - BS, SM, PhD
Balakrishnan, Ravin - BS, SM, PhD
Beck, Chris - BSc, MSc, PhD
Bonner, Anthony - BSc, MSc, PhD
Borodin, Allan - BS, SM, PhD, FAAAS
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, Eitan - PhD
Grosse, Roger - PhD
Grossman, Tovi - PhD
Gruninger, Michael - BSc, MS, PhD
Gupta, Arvind - BSc, PhD
Hadzilacos, 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, Kiriakos - 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
Mariakakis, Alexander - PhD
McIlraith, Sheila - BSc, MSc, PhD
Mehri Dehnavi, Maryam - PhD
Mihailidis, Alex - BASc, MASc, 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 Nhut - BSc, PhD
Urtasun, Raquel - PhD
Veneris, Andreas - BSc, MSc, PhD
Vijaykumar, Nandita - BE, ME
Wiebe, Nathan - PhD
Wigdor, Daniel - PhD
Williams, Joseph - PhD
Yu, Eric - BSc, MMath, PhD
Yuen, Henry - PhD
Zemel, Richard - BA, SM, PhD
Zhang, Zhaolei - BS, PhD

Members Emeriti

Cook, Stephen - BS, SM, PhD
Corneil, Derek - BSc, MA, PhD
Enright, Wayne - BSc, MSc, PhD
Fiume, Eugene - BM, MSc, PhD
Hehner, Eric C.R. - BSc, MSc, PhD
Hinton, Geoffrey E - BA, PhD
Jackson, Kenneth - BSc, MSc, PhD
Levesque, Hector - BSc, MSc, PhD
Miller, Renee - BS, BM, MS, PhD
Mylopoulos, John - BE, MSc, PhD
Neal, Radford - BSc, MSc, PhD
Rackoff, Charles - SB, SM, 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
Pitt, Francois - BSc, MSc, PhD
Reid, Karen - BS, MB, MS
Rossman, Benjamin - BA, MA, PhD
Sanner, Scott - BCS, BCS, PhD
Tsotsos, John - BASc, MSc, PhD, CRC
Wang, Bo - BS, MS, PhD
Yuan, Ding - PhD

Computer Science: Applied Computing MScAC

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 support 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 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.
- 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, with preference for at least one such letter from a faculty member in Physics.
- 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

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

Computer Science: Computer Science MScAC, MSc, PhD Courses

Not all courses are offered every year. Please consult the department for course offerings.

CSC2104H	Formal Methods of Program Design
CSC2107H	Compilers and Interpreters
CSC2108H	Automated Verification
CSC2125H	Algorithmic Program Verification
CSC2206H	Computer Systems Modelling
CSC2208H	Advanced Operating Systems
CSC2209H	Computer Networks
CSC2221H	Introduction to Distributed Computing
CSC2222H	Applications of Parallel and Distributed Computing
CSC2224H	Parallel Computer Architecture and Programming
CSC2226H	Topics in Verification
CSC2227H	Topics in the Design and Implementation of Operating Systems
CSC2228H	Topics in Mobile, Pervasive, and Cloud Computing
CSC2231H	Topics in Computer Systems
CSC2233H	Topics in Storage Systems
CSC2305H	Numerical Methods for Optimization Problems
CSC2306H	High Performance Scientific Computing
CSC2310H	Computational Methods for Partial Differential Equations
CSC2321H	Matrix Calculations
CSC2326H	Topics in Numerical Analysis
CSC2401H	Introduction to Computational Complexity
CSC2404H	Computability and Logic
CSC2405H	Automata Theory
CSC2410H	Introduction to Graph Theory
CSC2412H	Algorithms for Private Data Analysis (Prerequisite: CSC 373 or equivalent, or permission of the instructor.)
CSC2414H	Topics in Applied Discrete Mathematics
CSC2415H	Advanced Topics in the Theory of Distributed Computing
CSC2416H	Machine Learning Theory
CSC2417H	Algorithms for Genome Sequence Analysis
CSC2419H	Topics in Cryptography
CSC2420H	Algorithm Design, Analysis, and Theory
CSC2421H	Topics in Algorithms
CSC2426H	Fundamentals of Cryptography
CSC2427H	Topics in Graph Theory
CSC2429H	Topics in the Theory of Computation
CSC2431H	Topics in Computational Molecular Biology
CSC2451H	Quantum Computing, Foundations to Frontier (Exclusion: MAT1751H Quantum Computing, Foundations to Frontier.)
CSC2501H	Computational Linguistics
CSC2502H	Knowledge Representation and Reasoning
CSC2503H	Foundations of Computer Vision
CSC2504H	Computer Graphics
CSC2506H	Probabilistic Learning and Reasoning
CSC2508H	Advanced Management Systems
CSC2510H	Topics in Information Systems
CSC2511H	Natural Language Computing
CSC2512H	Constraint Satisfaction Problems
CSC2513H	Critical Thinking for Human Computer Interaction (Prerequisite: CSC 318 or equivalent, or permission of the instructor.)
CSC2514H	Human-Computer Interaction
CSC2515H	Introduction to Machine Learning
CSC2516H	Neural Networks and Deep Learning
CSC2518H	Spoken Language Processing
CSC2520H	Geometry Processing
CSC2521H	Topics in Computer Graphics
CSC2523H	Object Modelling and Recognition
CSC2524H	Topics in Interactive Computing
CSC2525H	Research Topics in Database Management
CSC2526H	HCI: Topics in Ubiquitous Computing
CSC2527H	The Business of Software
CSC2528H	Advanced Computational Linguistics
CSC2530H	Computer Vision for Advanced Digital Photography
CSC2532H	Statistical Learning Theory (Prerequisite: CSC2515H.)
CSC2533H	Foundations of Knowledge Representation
CSC2534H	Decision Making Under Uncertainty

CSC2536H	Topics in Computer Science and Education
CSC2537H	Information Visualization
CSC2539H	Topics in Computer Vision
CSC2540H	Computational Cognitive Models of Language
CSC2541H	Topics in Machine Learning
CSC2542H	Topics in Knowledge Representation and Reasoning
CSC2546H	Computational Neuroscience
CSC2547H	Current Algorithms and Techniques in Machine Learning
CSC2548H	Machine Learning in Computer Vision
CSC2549H	Physics-Based Animation
CSC2552H	Topics in Computational Social Science
CSC2556H	Algorithms for Collective Decision Making
CSC2558H	Topics in Multidisciplinary HCI
CSC2600H	Topics in Computer Science
CSC2604H	Topics in Human-Centred and Interdisciplinary Computing
CSC2606H	Introduction to Continuum Robotics (Prerequisite: Introduction to Robotics; e.g, CSC376 offered at UTM or AER525. Exclusion: CSC476 offered at UTM.)
CSC2611H	Computational Models of Semantic Change
CSC2612H	Computing and Global Development (Prerequisite: CSC 318 or equivalent, or permission of the instructor.)
CSC2621H	Topics in Robotics (Prerequisite: CSC411H or CSC2515H or ECE521H.)
CSC2626H	Imitation Learning for Robotics (Prerequisite: CSC411/2515 Machine Learning and Data Mining or ECE521 Inference Algorithms and Machine Learning or equivalent.)
CSC2699H	Special Reading Course in Computer Science
CSC2701H	Communication for Computer Scientists
CSC2702H	Technical Entrepreneurship
CSC2703H	MScAC Internship
CSC2720H	Systems Thinking for Global Problems
CSC4000Y	MSc Research Project in Computer Science
ECE1785H	Empirical Software Engineering

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
Kruttschnitt, 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.

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

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

CRI1010Y[0]	Professional Development Workshops (Credit/No Credit)
CRI2010H	Methodological Issues in Criminology and Sociolegal Studies

Elective Courses

CRI1020H	Law and State Power: Theoretical Perspectives
CRI1030H	Introduction to Science and Technology Studies: Sociolegal Approaches
CRI1050H	Transnationalism, Culture, and Power (TCP)
CRI2040H	Drugs and Crime
CRI2060H	Prisons and Punishment
CRI2120H	Data Analysis
CRI2140H	Guilt, Responsibility, and Forensics
CRI2150H	Preventing Wrongful Convictions
CRI3020H	Criminology and the Policy-Making Process
CRI3110H	Qualitative Research Methods
CRI3120H	Politics and Crime
CRI3130H	Policing
CRI3140H	Special Topics in Criminology and Sociolegal Studies
CRI3146H	Inequality and Criminal Justice
CRI3220H	Organized Crime and Corruption
CRI3240H	Penology
CRI3270H	The Psychology of Criminal Behaviour: Theory and Practice
CRI3310H	Special Topics in Criminology and Sociolegal Studies
CRI3320H	The Criminal Process
CRI3330H	Contemporary Issues in Safety and Security
CRI3340H	Special Topics in Criminology and Sociolegal Studies
CRI3350H	Directed Research in Criminology and Sociolegal Studies
CRI3351H	Directed Research in Criminology and Sociolegal Studies
CRI3355H	Sentencing
CRI3356H	Youth Crime and Youth Justice
CRI3360Y[0]	MA Research Paper

[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, Biology (Specialist), 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, Biology (Major), Honours BSc / MT
- UTSC, Chemistry (Major), Honours BSc / MT
- UTSC, Chemistry (Major Co-op), Honours BSc / MT
- UTSC, Chemistry (Specialist), Honours BSc / MT
- UTSC, 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

Collaborative Specializations

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

- Comparative, International and Development Education
  - Curriculum and Pedagogy, MA, MEd, PhD
  - Language and Literacies Education, MA, MEd, PhD
- Education, Francophonies and Diversity
  - Curriculum and Pedagogy, MA, MEd, PhD
  - Language and Literacies Education, MA, MEd, PhD
- Educational Policy
  - Curriculum and Pedagogy, MA, MEd, PhD
  - Language and Literacies Education, MA, MEd, PhD
- Engineering Education
  - Curriculum and Pedagogy, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - Language and Literacies Education, MA, MEd, PhD
- Knowledge Media Design
  - Curriculum and Pedagogy, MA, MEd, PhD
  - Language and Literacies Education, MA, MEd, PhD
- Sexual Diversity Studies
  - Curriculum and Pedagogy, MA, MEd, PhD
- Women and Gender Studies
  - Curriculum and Pedagogy, MA, MEd, PhD
  - 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

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
Kooy, 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 - MEd, 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, Alister - 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
Thiessen, Dennis - AB, MEd, DPhil
Wallace, John - BSc, BEd, MSc, PhD

Associate Members

Allen, Guy - BA, MA, PhD
Broad, Kathy - BEd, BA, MEd, PhD
Brownell, Cassie - MEd, PhD
Cavalcante, Alexandre - MASc
Clinton, Jean - MD
Colantoni, Laura - MA, PhD
Dubek, Michelle - PhD
Gini-Newman, Garfield - BA, BE, MA
Gloor, Peter Andreas - MSc, PhD
Hidi, Suzanne - BA, MA, PhD
Lancaster, Ron - BEd, BS, MMath
Le Pichon-Vorstman, Emmanuelle - PhD
Lory, Marie-Paule - BA, MS, MS, PhD
Marks Krpan, Cathy - BEd, MEd, EdD
Montemurro, David - BEd, BA, MES
Murphy-Graham, Erin - EdD
Reid, Mary - BA, BEd, MEd, EdD
Stewart Rose, Leslie - BEd, BM, MA, EdD
Topouzova, Lilia - BA, MA, PhD
Vemic, Angela - BA, BEd, MA, PhD
Zingaro, Daniel - BCS, MEd, MCS

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

Time Limit

3 years full-time;
6 years 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.

  - CTL1000H *Foundations of Curriculum & Pedagogy* (0.5 FCE).
- 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:
  - 1.5 FCEs in required courses: CTL1000H, CTL1620H, and CTL1624H.
  - 1.5 FCEs from the following: CTL1603H, CTL1606H, CTL1608H, CTL1609H, CTL1615H, CTL1616H, CTL1617H, CTL1621H, CTL1622H, CTL1623H, CTL1625H, CTL1926H.
  - 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:
  - 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.
  - 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
  - Two letters of reference: one academic and one professional.

Program Requirements

- **Coursework.** Students must normally complete **3.5 full-course equivalents (FCEs)** as follows:
  - At least 2.0 FCEs, normally CTL 1000-level courses.
  - CTL1899H *C&P Doctoral Proseminar in Curriculum & Pedagogy* (0.5 FCE).
  - Students are expected to take CTL1000H *Foundations of Curriculum & Pedagogy* (0.5 FCE) if they did not complete it at the master's level
  - Additional courses may be required of some students.
  - 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:
  - 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.
  - 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.
  - 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:
  - At least 2.0 FCEs, normally CTL 1000-level courses.
  - CTL1899H *C&P Doctoral Proseminar in Curriculum & Pedagogy* (0.5 FCE).
  - Students are expected to take CTL1000H *Foundations of Curriculum & Pedagogy* (0.5 FCE) if they did not complete it at the master's level.
  - One research methods course (0.5 FCE) from an approved course listing.
  - 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

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:
  - CTL1062H, CTL1064H, CTL1099H, CTL1100H, CTL1104H, CTL1322H, CTL1811H, CTL1818H, CTL1822H, CTL3034H, CTL5013H, CTL5018H, CTL5019H, CTL5020H, CTL5048H.
- 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:
  - CTL1011H, CTL1024H, CTL1031H, CTL1037H, CTL1048H, CTL1049H, CTL1062H, CTL1063H, CTL1064H, CTL1065H, CTL1099H, CTL1218H, CTL1219H, CTL1220H, CTL1221H, CTL1304H, CTL1306H, CTL1307H, CTL1312H, CTL1313H, CTL1318H, CTL1319H, CTL1330H, CTL1818H, CTL1822H, CTL3031H, CTL3034H, CTL5010H, CTL5048H, CTL5049H, CTL5050H, CTL5054H, CTL5055H.
- 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:
  - CTL1602H, CTL1603H, CTL1606H, CTL1608H, CTL1609H, CTL1615H, CTL1616H, CTL1617H, CTL1620H, CTL1621H, CTL1622H, CTL1623H, CTL1624H, CTL1625H, CTL1926H, CTL5011H, CTL5038H.
- 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:
  - CTL1063H, CTL1110H, CTL1320H, CTL1321H, CTL1322H, CTL1331H, CTL1332H, CTL5039H, CTL5049H, CTL5050H, CTL5053H, CTL5054H, CTL5056H.
- 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:
  - CTL1018H, CTL1041H, CTL1049H, CTL1062H, CTL1063H, CTL1099H, CTL1211H, CTL1306H, CTL1322H, CTL1809H, CTL1822H, CTL5019H, CTL5029H, CTL5030H.
- 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:
  - CTL1119H, CTL1120H, CTL1202H, CTL1206H, CTL1207H, CTL1209H, CTL1214H, CTL1215H, CTL1217H, CTL1218H, CTL1219H, CTL1221H, CTL1222H, CTL1223H, CTL1224H, CTL1225H, CTL1602H, CTL1606H, CTL1608H, CTL1609H, CTL1841H, CTL1926H, CTL5043H, CTL5044H.
- 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:
  - CTL1016H, CTL1027H, CTL1106H, CTL1110H, CTL1121H, CTL1319H, CTL1331H, CTL1424H, CTL1817H, CTL1825H, CTL3037H, CTL5011H, CTL5042H.
- 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

CTL1000H	Les fondements du curriculum et de la pédagogie
CTL1000H	Foundations of Curriculum & Pedagogy
CTL1001H	Values and Schooling
CTL1005H	Language, Literacy, and the School Curriculum
CTL1011H	Anti-Oppression Education in School Settings
CTL1011H	L'éducation pour l'anti-oppression en milieu scolaire
CTL1016H	Cooperative Learning Research and Practice
CTL1018H	Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning
CTL1023H	Technology and Education: Critical Perspectives on Theory and Practice
CTL1024H	Poststructuralism and Education
CTL1026H	Performed Ethnography
CTL1027H	Facilitating Reflective Professional Development
CTL1031H	Language, Culture, and Identity: Using the Literary Text in Teacher Development
CTL1033H	Multicultural Perspectives in Teacher Development: Reflective Practicum
CTL1036H	Thoughtful Teaching and Practitioner Inquiry
CTL1037H	Teacher Development: Comparative and Cross-Cultural Perspectives
CTL1040H	Fundamentals of Program Planning and Evaluation
CTL1041H	Research Methods In Education
CTL1042H	Instrument Development in Education
CTL1043H	Research Issues in Alternative Assessments
CTL1046H	Training Evaluation
CTL1047H	Course Self-Assessment
CTL1048H	Qualitative Methodology: Challenges and Innovations
CTL1049H	Critical Practitioner Research in Education
CTL1060H	Education and Social Development
CTL1062H	Performed Ethnography and Research Informed Theatre
CTL1063H	Pedagogies of Solidarity
CTL1064H	Applied Theatre and Performance in Sites of Learning
CTL1065H	Gender, Sexuality, and Schooling
CTL1099H	Critical Approaches to Arts-Based Research
CTL1100H	Arts in Urban Schools (Exclusion: CTL5033H)
CTL1104H	Play, Drama, and Arts Education
CTL1106H	Spirituality in Education
CTL1110H	The Holistic Curriculum
CTL1117H	Liberatory Practices in Drama and Education
CTL1119H	Gaining Confidence in Mathematics: A Holistic Approach to Rebuilding Math Knowledge and Overcoming Anxiety
CTL1120H	Effective Teaching Strategies in Elementary Mathematics Education: Research and Practice
CTL1121H	Foundations of Wellness Through a Phenomenology of Practice (Exclusion: CTL5045H)
CTL1122H	Exploring the Praxis of Environmental and Sustainability Education (Exclusion: CTL5027H)
CTL1200H	Science in the School Curriculum
CTL1202H	Mathematics in the School Curriculum: Elementary

CTL1206H	Teaching and Learning Science
CTL1207H	Teaching and Learning about Science: Issues and Strategies in Science, Technology, Society, and Environment (STSE) Education
CTL1208H	Curriculum Issues in Science and Technology: An Historical Perspective
CTL1209H	Current Issues in Science and Technology Education
CTL1211H	Action Research in Science, Mathematics, and Technology Education
CTL1212H	Curriculum Making in Science: Some Considerations in the History, Philosophy, and Sociology of Science
CTL1214H	Equity Issues in Science Education
CTL1215H	Teaching and Learning About Science and Technology: Beyond Schools
CTL1217H	Integrating Science, Mathematics, and Technology Curricula
CTL1218H	Culture and Cognition in Mathematics, Science, and Technology Education
CTL1219H	Making Secondary Mathematics Meaningful
CTL1220H	Sociocultural Theories of Learning
CTL1221H	Education for Human Goals Local and Global: How's Science Education Helping?
CTL1222H	Environmental Studies in Science, Mathematics, and Technology Education
CTL1223H	Activist Science and Technology Education
CTL1224H	Curriculum Issues in Science Education (Exclusion: CTL1799H)
CTL1225H	Mathematics Education: Linking Research and Practice (Exclusion: CTL5040H)
CTL1304H	Cultural Studies and Education
CTL1306H	La recherche qualitative en éducation: bases théoriques et pratiques
CTL1306H	Qualitative Research Methods in Education: Concepts and Methods
CTL1307H	Identité collective et éducation minoritaire de langue française
CTL1307H	Identity Construction and Education of Minorities
CTL1309H	Les stéréotypes sexuels dans les programmes scolaires
CTL1312H	Democratic Citizenship Education
CTL1313H	Gender Equity in the Classroom
CTL1316H	Global Education: Theory and Practice
CTL1318H	Teaching Conflict and Conflict Resolution
CTL1319H	Religious Education: Comparative and International Perspectives
CTL1320H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL1321H	Aboriginal Civilization: Language, Culture, and Identity
CTL1322H	Literacies of Land: Narrative, Storying, and Literature
CTL1325H	Citizenship Education, Pedagogy, and School Communities
CTL1330H	Education and Peacebuilding in Conflict Zones: International Comparative Perspectives
CTL1331H	Land-Centred Approaches to Research and Community Engagement
CTL1332H	Introduction to Decolonization in Education (Exclusion: CTL5010H)
CTL1333H	Settler Colonialism and Pedagogies of Oppression (Exclusion: CTL5042H)
CTL1400H	Classroom Adaptations and Instructional Strategies
CTL1402H	Adaptive Instruction in Inclusive Classrooms
CTL1403H	Special Education and Social Representation of Difference
CTL1406H	The Origins of Modern Schooling: Issues in the Development of the North American Educational System
CTL1407H	Rural Education and Social Reform in Canadian History, 1860–1960
CTL1424H	Religion, Ideology, and Social Movement in the Development of North American Education
CTL1426H	The History of Gender and Education in Canada
CTL1427H	Commemorating Canada, 1800s–1900s
CTL1428H	Immigration and the Development of Canadian Education
CTL1429H	Ethnicity and the Development of Canadian Education
CTL1430H	Gendered Colonialisms, Imperialisms, and Nationalisms in History
CTL1448H	Popular Culture and the Social History of Education II
CTL1454H	The Battle Over History Education in Canada
CTL1602H	Introduction to Computers in Education

CTL1603H	Introduction to Knowledge Building
CTL1604H	Video/Multimedia Design
CTL1606H	Computers in the Curriculum
CTL1608H	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

Doctoral Level

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

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 translinguistic abilities;
- Language and literacy education policies and planning;
- Pedagogy oriented to multiliteracies 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 fulfil this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - Students wishing to propose an alternative course to fulfil 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.**
- 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

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*
    - CTL3020H *Writing in a Second Language*
    - CTL3039H *Academic English Research and Acquisition* (Credit/No Credit)
    - CTL3101H *Language Awareness for Language Educators*
  - 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 fulfil this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - A student wishing to propose an alternative course to fulfil 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 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.
- 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 fulfil this requirement: CTL1018H, CTL1041H, CTL1306H, CTL3033H, CTL3807H, CTL3810H, APD1296H, APD3202H, JOI1287H, JOI1288H, JOI3228H, or SJE1905H.
  - A student wishing to propose an alternative course to fulfil 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

APD1251H	Reading in a Second Language
APD1296H	Assessing School-Aged Language Learners
CTL3000H	Foundations of Bilingual and Multicultural Education
CTL3001H	Research Colloquium in Language and Literacies Education
CTL3002H	Second Language Teaching Methodologies
CTL3003H	Planning and Organizing the Second Language Curriculum
CTL3004H	Language Awareness and its Role in Teacher Development
CTL3007H	Discourse Analysis (Exclusion: CTL3200H)
CTL3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL3010H	Second Language Learning
CTL3011H	Cognitive, Sociolinguistic, and Sociopolitical Orientations in Bilingual Education Research (Exclusion: CTL3201H)
CTL3013H	Language Assessment
CTL3015H	Language and Literacies Education in Multilingual Contexts
CTL3018H	Language Planning and Policy (Exclusion: CTL3202H)
CTL3020H	Writing in a Second Language
CTL3024H	Language Teacher Education
CTL3025H	Educational Sociolinguistics
CTL3026H	Pragmatics in Language Education
CTL3028H	Literacy in Elementary Education
CTL3029H	Children's Literature as a Foundation of Literate Behaviour Across the Curriculum
CTL3030H	Theory and Practice in Elementary Literacy Instruction
CTL3031H	Children's Literature Within a Multicultural Context
CTL3032H	Teaching Writing in the Classroom
CTL3033H	Literary Research Methodologies
CTL3034H	New Literacies: Making Multiple Meanings
CTL3035H	Critical Literacy in Action
CTL3036H	Expressive Writing: Practice and Pedagogy
CTL3037H	Biography in Educational Contexts
CTL3038H	Play, Language, and Literacy in Primary Classrooms (Exclusion: CTL5302H)
CTL3039H	Academic English Research and Acquisition (Credit/No Credit; exclusion: CTL5305H)
CTL3100H	Communication and Second Language Learning in the Workplace
CTL3101H	Language Awareness for Language Educators
CTL3200H	Analyse du discours (Exclusion: CTL3007H)
CTL3201H	Bilinguisme et éducation (Exclusion: CTL3011H)
CTL3202H	Politique et aménagement linguistique (Exclusion: CTL3018H)
CTL3410H	Schooling in the Movies: Education as Reflected in Hollywood Films
CTL3411H	Cinema and Historical Literacy
CTL3412H	Shakespeare and Cultural Literacy
CTL3413H	Reading Cinema and Cultural Identity
CTL3414H	Historical Literacy and Popular Literacy
CTL3415H	Educational Thought and Historical Literature
CTL3797H	Practicum in Language and Literacies Education: Master's Level
CTL3798H	Individual Reading and Research in Language and Literacies Education: Master's Level
CTL3899H	Proseminar in Language and Literacies Education Program: Master's Level
CTL5300H	Special Topics in Language and Literacies Education Program: Master's Level
CRE1001H	Séminaire d'études : Éducation, francophonies et diversité
JTE1952H	Language, Culture, and Education

Doctoral Level

CTL3805H	Multilingualism and Plurilingualism
CTL3806H	Sociocultural Theory and Second Language Learning
CTL3807H	Second Language Education Research Methods (RM)
CTL3808H	The Role of Instruction in Second Language Learning

CTL3810H	Second Language Classroom Research Methods
CTL3899H	Proseminar in Language and Literacies Education
CTL3998H	Individual Reading and Research in Language and Literacies Education: Doctoral Level
CTL6300H	Special Topics in Language and Literacies Education Program: Doctoral Level

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

CTL7000H	Curriculum and Teaching in Literacy
CTL7001H	Educational Professionalism, Ethics, and Law
CTL7002H	Curriculum and Teaching in Mathematics
CTL7006H	Educational Research 1
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
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)
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

Plus 1.0 FCE	Two elective courses

Junior/Intermediate Division (Grade 4 to Grade 10)

Core Courses

CTL7000H	Curriculum and Teaching in Literacy
CTL7001H	Educational Professionalism, Ethics, and Law
CTL7002H	Curriculum and Teaching in Mathematics
CTL7006H	Educational Research 1
CTL7008H	Introduction to Special Education and Mental Health
CTL7009H	Anti-Discriminatory Education
CTL7011H	Child and Adolescent Development and Learning
CTL7013H	Arts in Education
CTL7014H	Fundamentals of Teaching and Learning
CTL7015H	Educational Research 2

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).

CTL7020Y	Curriculum and Teaching in English — Intermediate/Senior
CTL7021Y	Curriculum and Teaching in History — Intermediate/Senior
CTL7022Y	Curriculum and Teaching in Mathematics — Intermediate/Senior
CTL7023Y	Curriculum and Teaching in Science: Biology — Intermediate/Senior
CTL7024Y	Curriculum and Teaching in Science: Chemistry — Intermediate/Senior
CTL7025Y	Curriculum and Teaching in Science: Physics — Intermediate/Senior
CTL7026Y	Curriculum and Teaching in Science: General
CTL7027Y	Curriculum and Teaching in Social Science: General — Intermediate/Senior
CTL7028Y	Curriculum and Teaching in Geography — Intermediate/Senior
CTL7029Y	Curriculum and Teaching in Music: Instrumental — Intermediate/Senior
CTL7030Y	Curriculum and Teaching in Music: Vocal
CTL7031Y	Curriculum and Teaching in Health and Physical Education
CTL7032Y	Curriculum and Teaching in Visual Arts — Intermediate/Secondary
CTL7033Y	Curriculum and Teaching in Dramatic Arts — Intermediate/Secondary
CTL7034Y	Curriculum and Teaching in French as a Second Language — Intermediate/Secondary
CTL7035Y	Curriculum and Teaching in Business Studies: General — Intermediate/Secondary (Exclusion: CTL7036Y.)
CTL7036Y	Curriculum and Teaching in Business Studies: Accounting — Intermediate/Secondary (Co-requisite: CTL7035Y.)
CTL7041Y	Curriculum and Teaching in Religion

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
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

Gong, Siew-Ging - MA, MScD, BDS, PhD
Grynpas, Marc - MSc, PhD
Haas, Daniel - BSc, BScD, DDS, PhD ***(Dean)***
Hinz, Boris - PhD
Kenny, David - BSc, DDS
Kishen, Anil - BDS, MDS, PhD ***(Coordinator, Graduate Studies)***
Lam, Ernest - BSc, MSc, DMD, PhD
Lawrence, Herenia - MSc, DDS, PhD
Levesque, Celine - BSc, MSc, PhD
Manolson, Morris - BS, PhD
McCulloch, Christopher - BSc, DDS, PhD
Moayedi, Massieh - BSc, PhD
Moriarty, Tara - BA, BSc, PhD
Prakki, Anuradha - MSc, DDS, PhD
Quinonez, Carlos R. - MSc, DMD, PhD
Santerre, Paul - BSc, MSc, PhD
Seltzer, Ze'ev - DMD, BMedSc
Sessle, Barry - BS, MDS, BDS, PhD
Seth, Arun - MS, PhD
Sherman, Philip - MD
Simmons, Craig - BSc, MSc, PhD
Sone, Eli - BSc, MS, PhD
Tenenbaum, Howard - DipPerio, DDS, PhD

Members Emeriti

Dao, Thuan - MSc, DMD, PhD
Fenton, Aaron - DipPerio, MS, DDS
Liebgott, Bernard - DDS, MScD, PhD
Mayhall, John - BA, MA, AM, DDS, PhD
McComb, Dorothy - BDS, MScD
Mock, David - DDS, PhD, FRCDC
Pilliar, Robert - BASc, PhD
Ross, Robert Bruce - MSc, DDS, FRCD
Titley, Keith - DDS, BDS, MScD
Watson, Philip - DDS, BDSc, MScD
Zarb, George - BScD, MS, DDS

Associate Members

Andrews, Paul - BSc, MSc, DDS
Barrett, Edward - BSc, MSc, DDS
Barzilay, Issac - MS, DDS
Basrani, Bettina - PhD
Bradley, Grace - MSc, DDS
Caminiti, Marco - BSc, MEd, DDS
Goldberg, Michael - DipPerio, BSc, MSc, DDS
Iglar, Karl - MD
Judd, Peter - BSc, MS, DDS
Kulkarni, Gajanan - LLB, MSc, BDS, PhD
Lai, Jim Yuan - BSc, MSc, DMD, FRCDC
Laporte, Audrey - BA, MA, PhD
Leong, Iona - BSc, MSc, BDS
Mendes, Vanessa C. - MSc, PhD
Metaxas, Angelos - DipOrH, MSc, DDS, DDSc
Nainar, Hashim - BDS, MScD
Pharoah, Michael - BSc, MSc, DDS
Somogyi-Ganss, Eszter - MSc, DMD, PhD
Suri, Sunjay - BDS, MDS
Sutherland, Susan - BScN, MSc, DDS
Tam, Laura - BSc, MSc, DDS
Tompson, Bryan - DipOrH, DDS
Wong, Michelle - BScPhm, DDS, MScD, EdD

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:**
    - DEN1001Y^{0} *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

[0] 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[0] *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[0] *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 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 II* (1.0 FCE)
    - PDE9094Y[0] *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

[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 (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:**
    - DEN1001Y[0] *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)
    - 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)
    - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
  - **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[0] *Clinical Conferences* (Credit/No Credit)
  - **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)
    - PDE9094Y[0] *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

[0] 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.

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[0] *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[0] *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

Time Limit

3 years full-time;
6 years part-time

[0] Course that may continue over a program. The course is graded or credit is given when completed.

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:

    - **Year 1:**
        - DEN1010H *Research Ethics* (Credit/No Credit; 0.5 FCE)
        - DEN1015H *Introduction to Biostatistics* (0.5 FCE)
    - **Year 2:**
        - DEN1001Y[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE).
- In the **specialty of Dental Public Health**, complete **7.0 required FCEs, 1.5 elective FCEs, and a research practicum (0.5 FCE)** 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[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
        - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - **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
        - 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

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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

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[0] *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.

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[0] *Clinical Conferences* (Credit/No Credit)
  - Begin **thesis research** (RST9999Y)
- **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[0] *Single Tooth Replacements with Implant-Supported Prosthesis*
  - PDE9091Y *Endodontic Clinic* (1.0 FCE)
  - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
  - Continue with thesis research (RST9999Y)
- **Year 3:**
  - DEN5001Y *Graduate Endodontics Case Presentations* (1.0 FCE)
  - DEN5003Y *Graduate Endodontics Current Literature* (1.0 FCE)
  - DEN5004Y[0] *Single Tooth Replacements with Implant-Supported Prosthesis* (1.0 FCE)
  - PDE9091Y *Endodontic Clinic* (1.0 FCE)
  - **Oral defence of the 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.

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

[++] Course is offered in alternate years.

MSc Program (Endodontics 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[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE).
- In the **specialty of Endodontics**, complete **18.0 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)
    - 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[0] *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:**
        - 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[0] *Single Tooth Replacements with Implant-Supported Prosthesis*
        - PDE9091Y *Endodontic Clinic* (1.0 FCE)
        - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
    - **Year 3:**
        - DEN5001Y *Graduate Endodontics Case Presentations* (1.0 FCE)
        - DEN5003Y *Graduate Endodontics Current Literature* (1.0 FCE)
        - DEN5004Y[0] *Single Tooth Replacements with Implant-Supported Prosthesis* (1.0 FCE)
        - PDE9091Y *Endodontic Clinic* (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

[0] 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.

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:**
        - DEN1001Y[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE).
- In the **specialty of Oral and Maxillofacial Pathology**, complete **5.5 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.
    - **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[0] *Seminars in Advanced Oral Pathology*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN1011Y[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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:**
    - DEN1001Y[0] *Seminars in 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 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[0] *Seminars in Advanced Oral Pathology*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 FCE)
  - **Year 3:**
    - DEN1011Y[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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 specialty 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[0] *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[0] *Advanced Seminars in Oral Pathology*
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN1011Y[0] *Advanced Seminars in Oral Pathology*
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - Continue with thesis research (RST9999Y)
  - **Year 4:**
    - DEN1011Y[0] *Advanced Seminars in Oral Pathology* (1.0 FCE)
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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[0] *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[0] *Advanced Seminars in Oral Pathology*
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 FCE)

- **Year 3:**
  - DEN1011Y[0] *Advanced Seminars in Oral Pathology*
  - DEN1012Y[0] *Oral Medicine*
  - DEN1013Y[0] *Oral Surgical Pathology*
- **Year 4:**
  - DEN1011Y[0] *Advanced Seminars in Oral Pathology* (1.0 FCE)
  - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
  - DEN1013Y[0] *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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

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.

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:**
    - DEN1001Y[0] *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.

  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[0] *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:**
    - DEN1013Y[0] *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[0] *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[0] *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

[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 (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:**
    - DEN1001Y[0] *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)
    - DEN1013Y[0] *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:**
    - DEN1013Y[0] *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[0] *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)
    - PDE9094Y[0] *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

[0] 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 (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:**
    - DEN1001Y[0] *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 *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[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - Begin **thesis research** (RST9999Y)
    - Principles of Surgery module taken through the Department of Surgery in the Temerty Faculty of Medicine (0.0 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)
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN1013Y[0] *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)
    - PDE9094Y[0] *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)
    - **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

[0] 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[0] *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[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - Principles of Surgery module taken through the Department of Surgery 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:**
    - 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[0] *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)
    - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
  - **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)
    - Prepare a **research practicum** (DEN 1061H; 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

[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, 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 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[0] *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** 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[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 FCE)
    - Begin **thesis research** (RST9999Y)
  - **Year 2:**
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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[0] *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[0] *Oral Medicine*
    - DEN1013Y[0] *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[0] *Oral Medicine*
    - DEN1013Y[0] *Oral Surgical Pathology*
  - **Year 3:**
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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[0] *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.

  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[0] *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[0] *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[0] *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

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 (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[0] *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.

  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[0] *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)
    - DEN2009H *Classic Theories of Craniofacial Growth* (0.5 FCE)
    - DEN2011Y *Craniofacial Morphology and Development* (1.0 FCE)
    - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit)
  - **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[0] *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

[0] 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 (Pediatric Dentistry Specialty)

MSc Program (Pediatric Dentistry Specialty)

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[0] *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.

  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* (0.0 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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
    - DEN4002Y[0] *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[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - Begin **thesis research** (RST9999Y)
  - **Year 2:**
    - DEN1070H[++] *Advances in Dental Materials Science* (0.5 FCE)
    - DEN4001Y[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
    - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review*
    - DEN4008Y[0] *Pediatric Orthodontics*
    - DEN4013Y *Clinical Pediatric Dentistry II* (Credit/No Credit; 1.0 FCE)
    - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 3:**
    - DEN4001Y[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry* (1.0 FCE)
    - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review* (1.0 FCE)
    - DEN4008Y[0] *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

[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 (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 **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:**
    - DEN1001Y[0] *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.

  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* (0.0 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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
    - DEN4002Y[0] *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[0] *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[0] *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:**
    - DEN1070H[++] *Advances in Dental Materials Science* (0.5 FCE)
    - DEN4001Y[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
    - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review*
    - DEN4008Y[0] *Pediatric Orthodontics*
    - DEN4013Y *Clinical Pediatric Dentistry II* (Credit/No Credit; 1.0 FCE)
    - PDE9094Y[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
  - **Year 3:**
    - DEN4001Y[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry* (1.0 FCE)
    - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review* (1.0 FCE)
    - DEN4008Y[0] *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.

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.

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[0] *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.

  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)
    - DEN1036Y[0] *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)
    - Begin **thesis research** (RST9999Y)
  - **Year 2:**
    - DEN1002H *Oral Pathology* (0.5 FCE)
    - DEN1022H *Investigating Pathogenic Biofilms* (0.5 FCE)
    - DEN1034Y *Periodontology: Seminars and Clinics II* (1.0 FCE)
    - DEN1036Y[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - Continue with thesis research (RST9999Y)
  - **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)
    - PDE9094Y[0] *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

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)
  - **Years 1, 2, and 3:**
    - DEN1001Y[0] *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.

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)
  - DEN1036Y[0] *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)
  - DEN1036Y[0] *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[0] *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)
  - PDE9094Y[0] *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

[0] 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 (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:**
    - DEN1001Y[0] *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.

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[0] *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[0] *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[0] *Clinical Prosthodontics* (1.0 FCE)
  - PDE9094Y[0] *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

[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 (Prosthodontics 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[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE).
- In the **specialty of Prosthodontics**, complete a total of **18.0 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:**
    - 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[0] *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)
        - 1.5 elective FCEs in clinical, epidemiological, or basic science research methodology appropriate for clinical or public health practice
    - **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[0] *Clinical Prosthodontics*
        - DEN1070H[++] *Advances in Dental Materials Sciences* (0.5 FCE)
    - **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[0] *Clinical Prosthodontics* (1.0 FCE)
        - PDE9094Y[0] *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

[0] 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 (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[0] *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[0] *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 **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[0] *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

[0] Course that may continue over a program. Credit is given when the course is completed.

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 fulfil 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[0] *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[0] *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[0] *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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

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:**
    - 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).
- 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)
    - 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)
    - 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* (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^{0} *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)
    - PDE9094Y^{0} *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 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[0] *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)
    - 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)
    - 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* (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[0] *Clinical Conferences* (Credit/No Credit)
    - 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 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)
    - PDE9094Y[0] *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.

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:
  - **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).
- In the **specialty of Dental Public Health**, complete **7.0 required FCEs and 1.0 elective FCE** 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[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
    - 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 **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.
  - **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.
- **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 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:**
    - DEN1100Y[0] *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:
  - **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[0] *Clinical Conferences* (Credit/No Credit; 1.0 FCE)
    - 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.
- **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.

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^{0} *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^{0} *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^{0} *Single Tooth Replacement with Implant Supported Prosthesis*
  - PDE9091Y *Endodontic Clinic* (1.0 FCE)
  - PDE9094Y^{0} *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^{0} *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)

- **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.

[+] 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 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:**
    - DEN1100Y[0] *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[0] *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[0] *Single Tooth Replacement with Implant Supported Prosthesis*
    - PDE9091Y *Endodontic Clinic* (1.0 FCE)
    - PDE9094Y[0] *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.
  - **Years 3 to 5:**
    - DEN5001Y *Graduate Endodontics Case Presentations* (1.0 FCE)
    - DEN5003Y *Graduate Endodontics Current Literature* (1.0 FCE)
    - DEN5004Y[0] *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)
    - **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.

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

[++] Course is offered in alternate years.

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.

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)
    - **Years 2 and 3:**
        - DEN1100Y[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE).
- In the **specialty of Oral and Maxillofacial Pathology**, 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[0] *Seminars in Advanced Oral Pathology*
        - DEN1013Y[0] *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[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)

        - DEN1012Y *Oral Medicine* (1.0 FCE)
        - DEN1013Y[0] *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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

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 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. 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).
- In the **specialty of Oral and Maxillofacial Pathology**, complete **5.5 required FCEs and 1.0 elective FCE** as follows:
    - **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[0] *Seminars in Advanced Oral Pathology*
        - DEN1013Y[0] *Oral Surgical Pathology*
        - DEN1014H *Clinical Epidemiology and Evidence-Based Care* (0.5 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:**
        - DEN1011Y[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
        - DEN1012Y *Oral Medicine* (1.0 FCE)
        - DEN1013Y[0] *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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

Dentistry: Dentistry PhD (Oral and Maxillofacial Pathology and Oral Medicine Specialty)

Program Description

The Dentistry PhD, Oral and Maxillofacial Pathology and Oral Medicine specialty is a seven-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 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 (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[0] *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[0] *Seminars in Advanced Oral Pathology*
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *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[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *Oral Surgical Pathology* (1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 4:**
    - DEN1011Y[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[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)

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:**
    - DEN1100Y[0] *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[0] *Seminars in Advanced Oral Pathology*
    - DEN1012Y[0] *Oral Medicine*
    - DEN1013Y[0] *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[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *Oral Surgical Pathology* (1.0 FCE)
    - Continue with thesis research (RST9999Y)
  - **Year 4:**
    - DEN1011Y[0] *Seminars in Advanced Oral Pathology* (1.0 FCE)
    - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0] *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

[0] 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 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:**
    - DEN1100Y[0] *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)
    - DEN1013Y[0] *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:**
    - DEN1013Y[0] *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[0] *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 **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:**
    - DEN1096Y *Advanced Oral and Maxillofacial Radiology III* (1.0 FCE)
    - PDE9094Y[0] *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.

[++] 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 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[0] *Seminars in Oral Health Sciences* (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)
    - DEN1013Y[0] *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:**
    - DEN1013Y[0] *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)
    - PDE9094Y[0] *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)
    - PDE9094Y[0] *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.

[++] Course is offered in alternate years.

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:**
    - DEN1100Y^0 *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)
    - DEN1007H *Oral Radiology* (0.5 FCE)
    - DEN1013Y^0 *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^0 *Clinical Conferences* (Credit/No Credit)
    - Principles of Surgery module taken through the Department of Surgery 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:**
    - 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)
    - 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:**
    - DEN1013Y^0 *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)
    - PDE9094Y^0 *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)

    - **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

[0] Course that may continue over a program. The course is graded or credit is given when completed.

PhD Program (Oral and Maxillofacial Surgery 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 Surgery. 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[0] *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 1:**
        - DEN1002H *Oral Pathology* (0.5 FCE)
        - DEN1007H *Oral Radiology* (0.5 FCE)
        - DEN1013Y[0] *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[0] *Clinical Conferences* (Credit/No Credit)
        - Principles of Surgery module taken through the Department of Surgery 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:**
        - 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)
        - 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:**
        - DEN1013Y[0] *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)
        - PDE9094Y[0] *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)
- **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

[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[0] *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[0] *Oral Medicine*
    - DEN1013Y[0] *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[0] *Oral Medicine*
    - DEN1013Y[0] *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[0] *Oral Medicine* (1.0 FCE)
    - DEN1013Y[0]*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

[0] 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 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[0] *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[0] *Oral Medicine*
        - DEN1013Y[0] *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[0] *Oral Medicine*
        - DEN1013Y[0] *Oral Surgical Pathology*
        - 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:**
        - DEN1012Y[0] *Oral Medicine* (1.0 FCE)
        - DEN1013Y[0] *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

[0] 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:**
    - 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* (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^{0} *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^{0} *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

[0] 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 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[0] *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[0] *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 **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[0] *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

[0] 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:
  - **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)
- 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.
  - **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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
    - DEN4002Y[0] *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[0] *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[0] *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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
        - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review*
        - DEN4008Y[0] *Pediatric Orthodontics*
        - DEN4013Y *Clinical Pediatric Dentistry II* (Credit/No Credit; 1.0 FCE)
        - PDE9094Y[0] *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.
    - **Year 3:**
        - DEN4001Y[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry* (1.0 FCE)
        - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review* (1.0 FCE)
        - DEN4008Y[0] *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

[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 (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 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[0] *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.
    - **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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
        - DEN4002Y[0] *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[0] *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[0] *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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry*
        - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review*
        - DEN4008Y[0] *Pediatric Orthodontics*
        - DEN4013Y *Clinical Pediatric Dentistry II* (Credit/No Credit; 1.0 FCE)
        - PDE9094Y[0] *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[0] *Pediatric Dentistry 1: Theoretical Pediatric Dentistry* (1.0 FCE)
        - DEN4002Y[0] *Pediatric Dentistry 2: Journal Review* (1.0 FCE)
        - DEN4008Y[0] *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

[0] 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:**

    - 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).
- 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 *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[0] *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)
    - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
  - **Year 2:**
    - DEN1002H *Oral Pathology* (0.5 FCE)
    - DEN1022H *Investigating Pathogenic Biofilms* (0.5 FCE)
    - DEN1034Y *Periodontology: Seminars and Clinics II* (1.0 FCE)
    - DEN1036Y[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - 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:**
    - 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)
    - DEN1091Y *Parenteral Moderate Sedation for Dental Procedures* (Credit/No Credit; 1.0 FCE)
    - PDE9094Y[0] *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

[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 (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 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[0] *Seminars in Oral Health Sciences* (Credit/No Credit; 1.0 FCE)

- 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 *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[0] *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)
    - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
  - **Year 2:**
    - DEN1002H *Oral Pathology* (0.5 FCE)
    - DEN1022H *Investigating Pathogenic Biofilms* (0.5 FCE)
    - DEN1034Y *Periodontology: Seminars and Clinics II* (1.0 FCE)
    - DEN1036Y[0] *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[0] *Clinical Conferences* (Credit/No Credit)
    - 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:**
    - 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)
    - DEN1091Y *Parenteral Moderate Sedation for Dental Procedures* (Credit/No Credit; 1.0 FCE)
    - PDE9094Y[0] *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

[0] 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^{0} *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.

  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^{0} *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)
    - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
  - **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^{0} *Clinical Prosthodontics*
    - DEN1070H^{++} *Advances in Dental Materials Sciences* (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:**
    - 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^{0} *Clinical Prosthodontics* (1.0 FCE)
    - PDE9094Y^{0} *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

[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 (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[0] *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)
    - 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[0] *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)
    - Develop a **thesis proposal**, form a **supervisory committee**, and complete an **ethics review** (if applicable)
  - **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[0] *Clinical Prosthodontics*
    - DEN1070H[++] *Advances in Dental Materials Sciences* (0.5 FCE)
    - Continue with thesis research (RST9999Y)
    - Successfully pass a **transfer 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 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[0] *Clinical Prosthodontics* (1.0 FCE)
    - PDE9094Y[0] *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

[0] 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

DEN1001Y[0]	Seminars in Oral Health Sciences (Credit/No Credit)
DEN1010H	Research Ethics (Credit/No Credit)
DEN1015H	Introduction to Biostatistics
DEN1100Y[0]	Seminars in Oral Health Sciences (Credit/No Credit)

[0] Course that may continue over a program. Credit is given when the course is completed.

General Courses

DEN1014H	Clinical Epidemiology and Evidence-Based Care (co-requisite: DEN1015H)
DEN1022H	Investigating Pathogenic Biofilms
DEN1060H	Oral Physiology: Sensory and Neuromuscular Function
DEN1070H	Advances in Dental Materials Science
DEN1080Y	Biology of Connective Tissues
DEN1081H	Bone Interfacing Implants
DEN1098H	Reading Course in Oral Health Sciences

Courses for Students in MSc or PhD Dental Specialties

CHL5004H	Introduction to Public Health Sciences
DEN1002H	Oral Pathology
DEN1003H	Preventive Dentistry
DEN1006Y	Seminars in Dental Public Health
DEN1007H	Oral Radiology
DEN1008H (0.25 FCE)	Cone Beam CT Imaging (Credit/No Credit) (prerequisite: DEN1007H)
DEN1011Y[0]	Seminars in Advanced Oral Pathology
DEN1012Y[0]	Oral Medicine (operates as a regular, non-continuous course for students in the Oral and Maxillofacial Pathology specialty)
DEN1013Y[0]	Oral Surgical Pathology (operates as a regular, non-continuous course for students in the Periodontics specialty)
DEN1014H	Clinical Epidemiology and Evidence-Based Care
DEN1016H	Occlusion: Function and Dysfunction
DEN1017H	Temporomandibular Disorders
DEN1022H	Investigating Pathogenic Biofilms
DEN1033Y	Periodontology: Seminars and Clinics I
DEN1034Y	Periodontology: Seminars and Clinics II
DEN1035Y	Periodontology: Seminars and Clinics III
DEN1036Y[0]	Literature Review in Periodontology
DEN1037Y	Clinical Case Presentations
DEN1038Y	Biomaterials and Implant/Reconstructive Dentistry
DEN1039Y	Principles and Practice of Periodontology
DEN1041Y	Prosthodontics I: Prosthodontic Treatment Planning
DEN1042Y	Prosthodontics II: Restorative Dentistry
DEN1043Y	Prosthodontics III: Patients With the Partially Edentulous Mouth and Advanced Prosthodontic Care
DEN1044Y	Prosthodontics IV: Patients With the Fully Edentulous Mouth and Advanced Prosthodontic Care
DEN1045Y	Prosthodontics V: Critical Appraisal of the Literature
DEN1046Y[0]	Clinical Prosthodontics
DEN1051Y	Oral Epidemiology
DEN1052Y	General Anaesthesia for Medical Procedures — Pediatric

DEN1053Y	General Anaesthesia for Medical Procedures — Adult
DEN1055H	Basic Principles of Dental Anaesthesia
DEN1056Y	Basic Concepts in Clinical Medicine
DEN1060H	Oral Physiology: Sensory and Neuromuscular Function
DEN1061H	Research Practicum
DEN1062H	Pharmacology of Dental Therapeutics
DEN1063Y	Practicum in Dental Public Health
DEN1064H	Management Principles in Canadian Dental Health Organizations
DEN1070H	Advances in Dental Materials Science
DEN1071H+	Medical Anaesthesia Seminars I (Credit/No Credit)
DEN1072H+	Medical Anaesthesia Seminars II (Credit/No Credit)
DEN1073Y	Dental Anaesthesia Graduate Seminars
DEN1074Y	Foundations of Medicine as Applied to Dental Anaesthesia
DEN1075Y	General Anaesthesia for Dentistry — Pediatric
DEN1076H+	General Anaesthesia for Medical Procedures — Adult I
DEN1077H+	General Anaesthesia for Medical Procedures — Adult II
DEN1078H+	General Anaesthesia for Dental Procedures — Adult I
DEN1079H+	General Anaesthesia for Dental Procedures — Adult II
DEN1083Y	Experiences in Clinical Medicine
DEN1084H+	Experiences in Clinical Teaching I (Credit/No Credit)
DEN1085H+	Experiences in Clinical Teaching II (Credit/No Credit)
DEN1086H+	Experiences in Clinical Teaching III (Credit/No Credit)
DEN1087Y	Fundamentals of Dental Anaesthesia
DEN1088Y	Fundamentals of Dental Anaesthesia II
DEN1089Y	Fundamentals of Dental Anaesthesia III
DEN1090H	Inhalation and Oral Minimal and Moderate Sedation for Dental Procedures (Credit/No Credit)
DEN1091Y	Parenteral Moderate Sedation for Dental Procedures (Credit/No Credit)
DEN1094Y	Advanced Oral Radiology I (co-requisite: DEN1007H)
DEN1095Y	Advanced Oral Radiology II (prerequisite: DEN1094Y)
DEN1096Y	Advanced Oral Radiology III (prerequisite: DEN1095Y)
DEN2001Y	Orthodontics 1: Advanced Orthodontic Diagnosis and Treatment Planning
DEN2002Y	Orthodontics 2: Biomechanics Orthodontic Technique and Practice Administration
DEN2003Y	Orthodontics 3: Orthodontic Technique and Clinical Practice
DEN2004Y	Orthodontics 4: Interceptive Orthodontics
DEN2005Y	Surgical Orthodontics
DEN2006Y	Facial Growth and Facial Analysis
DEN2007Y	Craniofacial Anomalies
DEN2008Y	Craniofacial Anatomy and Osteology
DEN2009H	Classic Theories of Craniofacial Growth
DEN2010H	Tissue Reaction to Orthodontic and Orthopedic Forces
DEN2011Y	Craniofacial Morphology and Development
DEN3001Y	Oral and Maxillofacial Surgery 1: The Physiologic Basis of Disease
DEN3002Y	Oral and Maxillofacial Surgery 2: Principles and Practice of Oral and Maxillofacial Surgery
DEN3003Y	Oral and Maxillofacial Surgery 3: Evidence-Based Literature Reviews in Oral and Maxillofacial Surgery
DEN3004Y	Oral and Maxillofacial Surgery 4: Applied Surgical Anatomy of the Head and Neck
DEN3005H	Head and Neck Anatomy
DEN4001Y0	Pediatric Dentistry 1: Theoretical Pediatric Dentistry
DEN4002Y0	Pediatric Dentistry 2: Journal Review
DEN4003Y	Pediatric Dentistry 3: Facial and Dental Growth and Development in Pediatric Dentistry
DEN4004H	Pediatric Dentistry 4: Child Behaviour Management
DEN4005Y	Pediatric Dentistry 5: Clinical Pediatric Dentistry
DEN4006Y	Pediatric Dentistry 6: Oral and Maxillofacial Surgery as Applied to Pediatric Dentistry
DEN4007H	Pediatric Dentistry 7: Therapy and Trauma
DEN4008Y0	Pediatric Orthodontics
DEN4009Y	Pediatrics
DEN4010Y	Pediatric Medicine and Hospital Dentistry

DEN4011Y	Conscious Sedation and Anaesthesia in Pediatric Dentistry
DEN4012Y	Clinical Pediatric Dentistry I (Credit/No Credit) (co-requisite: DEN1090H)
DEN4013Y	Clinical Pediatric Dentistry II (Credit/No Credit) (co-requisite: DEN4012Y)
DEN4014Y	Clinical Pediatric Dentistry III (Credit/No Credit) (co-requisite: DEN4013Y)
DEN5001Y	Graduate Endodontics Case Presentations
DEN5002Y	Graduate Endodontics Topical Literature
DEN5003Y	Graduate Endodontics Current Literature
DEN5004Y[0]	Single Tooth Replacements with Implant-Supported Prosthesis
DEN5005H[+]	Introduction to Graduate Endodontics
LMP1300Y	General and Special Pathology
PDE9091Y	Endodontic Clinic
PDE9094Y[0]	Clinical Conferences (Credit/No Credit)
RST9999Y	Research/Thesis

[0] 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
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
Kleber, Pia - BA, MA, 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

Preston, V.K. - DPhil
Salverson, Julie - PhD
Sears, Djanet - MFA
Sinclair, Donald - MA
Williams, Katherine - BA, 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)
  - 1.5 FCEs in electives.
  - 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)
  - DRA5002H *Research Development in Drama, Theatre, and Performance Studies* (0.5 FCE).
- 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

DRA1001H	History and Historiography in Drama, Theatre, and Performance Studies
DRA1002H	Graduate Laboratory in Drama, Theatre, and Performance Studies
DRA1003H	Introduction to Drama, Theatre, and Performance Studies
DRA1004Y	MA Thesis
DRA1011H	Sources and Concepts in Drama, Theatre, and Performance Studies I
DRA1012H	Sources and Concepts in Drama, Theatre, and Performance Studies II
DRA1013H	Modelling New Scholarship in Drama, Theatre, and Performance Studies
DRA1014H	Teaching and Learning in Drama, Theatre, and Performance Studies
DRA1105H	Performing History
DRA3901H	Topics in Theatre, Drama, and Performance
DRA3902H	Topics in Theatre, Drama, and Performance
DRA3903H	Topics in Theatre, Drama, and Performance
DRA3904H	Topics in Theatre, Drama, and Performance
DRA3905H	Topics in Theatre, Drama, and Performance
DRA3906H	Topics in Theatre, Drama, and Performance
DRA3907H	Topics in Theatre, Drama, and Performance
DRA3908H	Topics in Theatre, Drama, and Performance
DRA4031H	Studies in Canadian Drama and Theatre

DRA4090Y	Directed Reading/Theatre Research
DRA4091H	Directed Reading/Theatre Research
DRA4092H	Directed Reading
DRA4093H	Directed Reading
DRA5001H	The Disciplines of Drama, Theatre, and Performance Studies: Research Methods
DRA5002H	Research Development in Drama, Theatre, and Performance Studies (Credit/No Credit)

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 - BES, MSc, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria - BES, 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, Semechah - 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, Mathew - 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:
  - 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.
- 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.

Program Length

4 years

Time Limit

6 years

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:
  - 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

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 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 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.
- 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 a total of **1.5 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
  - 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.

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.

ESS1101H	Seminars in Earth Sciences
ESS1423H	Mineralogy
ESS1430H	Basin Analysis
ESS1436H	Paleoecological Assessment of Environmental Change
ESS1441H	Advanced Structure
ESS1445H	Global Tectonics
ESS1461H	Paleoenvironmental Studies
ESS1463H	Contaminants in the Environment
ESS2222H	Tectonics and Planetary Dynamics
ESS2302H	Mineral Resources
ESS2303H	Earth Systems Evolution
ESS2304H	Geochemistry
ESS2608H	Advanced Glacial Sedimentology
ESS2704H	Isotope Geochemistry
ESS2708H	Characterization of Geological Materials
ESS3601Y+	Research Presentation
ESS3603Y+	Research Project
ESS3604H	Selected Topics in Geology
ESS3605H	Selected Topics in Geochemistry
ESS3606H	Selected Topics Earth System Evolution
ESS3607H	Selected Topics in Geodynamics
ESS3608H	All-Course Research Project
JPE1452H	Geophysical Imaging: Non-seismic Methods
JPE1493H	Seismology

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: www.eas.utoronto.ca
Email: eas.grad@utoronto.ca

Telephone: (416) 946-3625
Fax: (416) 978-5711

Department of East Asian Studies
University of Toronto
Robarts Library 14-080, 130 St. George Street
Toronto, Ontario M5S 3H1
Canada

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, 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, Kyoungrok - 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:
    - 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)
    - 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 course work, 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–.
  - 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.
  - 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

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–.
  - 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

EAS1101Y	Classical Chinese I
EAS1102H	Classical Chinese II (prerequisite: EAS110Y1; exclusion: EAS458H1)
EAS1103Y	Introduction to Classical Japanese
EAS1177H	Chinese Cultural and Historical Studies
EAS1180H	Environmental Criticism
EAS1335H	Violence, Justice, the Human
EAS1336H	Memory and Trauma in Critical East Asian Historical Perspective
EAS1337H	Diaspora and Transpacific Studies
EAS1339H	Topics in Chinese Art Theories
EAS1419H	Chinese Cultural Studies Seminar: May Fourth
EAS1432H	Korean Cultural Studies Seminar
EAS1435H	Crisis, Repetition, and History
EAS1436H	Rethinking Realism in 20th Century Korea
EAS1439H	Crisis, Population, Archive
EAS1441H	Advanced Topics in Japanese Cinema
EAS1445H	On the Organic: Land and Labour Power
EAS1447H	Sound Studies and Modern Japan
EAS1449H	Future, Architecture, Japan

EAS1474H	US and Canada's Wars in East Asia
EAS1475H	Contemporary Cultural Theories
EAS1477H	Samurai Culture (exclusion: EAS477H1)
EAS2020H	Critical Approaches to East Asia
EAS2323H	Rethinking Chinese Cultural History

History

EAS1130H	Rethinking China's Cultural Revolution: History, Politics, and Theory
EAS1140Y	From Republic to People's Republic: The Chinese Revolution from 1895 to the Present
EAS1176H	Comparative Historical Socialisms in East Asia and Beyond
EAS1409H	Cities in Premodern China
EAS1411H	Art and Archaeology of Early China
EAS1412H	Special Topics in Archaeology of Ancient China
EAS1173H,Y	Modern Korean History Seminar
EAS1174Y	Rethinking Empire in East Asia
EAS1425H	Critique of Everyday Life and Capitalism
EAS1426H	Transition, Subjectivity, Revolution
EAS1446H	The Communist Hypothesis and Asia (exclusion: EAS446H1)
EAS1466H	History, Everyday Life, and North Korea
EAS1471H	Issues in Political Economy of South Korea
EAS1472H	Cold War in the Pacific
EAS1496H	History of the Chinese Book

Language

EAS1115Y	Reading Japanese for Graduate Purposes (Credit/No Credit)
EAS1263H	Classical Japanese I
EAS1301Y	Modern Standard Japanese I (Credit/No Credit)
EAS1302Y	Modern Standard Japanese II (Credit/No Credit)
EAS1303Y	Modern Standard Japanese III (Credit/No Credit)
EAS1304H	Modern Standard Japanese IVa (Credit/No Credit)
EAS1305H	Modern Standard Japanese IVb (Credit/No Credit)
EAS1321H	Japanese I for Students with Prior Background (Credit/No Credit)
EAS1322H	Modern Standard Japanese II Prior Background (Credit/No Credit)
EAS1621Y	Modern Standard Korean I (Credit/No Credit)
EAS1622Y	Modern Standard Korean II (Credit/No Credit)
EAS1623Y	Modern Standard Korean III (Credit/No Credit)
EAS1624Y	Modern Standard Korean IV (Credit/No Credit)
EAS1626Y	Academic and Professional Korean (Credit/No Credit)
EAS1631Y	Accelerated Modern Standard Korean 1 and 2 (Credit/No Credit)
EAS1632H	Accelerated Modern Standard Korean 2 (Credit/No Credit)
EAS1801Y	Modern Standard Chinese I (Credit/No Credit)
EAS1802Y	Modern Standard Chinese II (Credit/No Credit)
EAS1803Y	Modern Standard Chinese III (Credit/No Credit)
EAS1811Y	Modern Standard Chinese I for Students With Background in Chinese (Credit/No Credit)
EAS1812H	Modern Standard Chinese II for Students With Background in Chinese (Credit/No Credit)
EAS1814H	Modern Standard Chinese IVa (Credit/No Credit)
EAS1815H	Modern Standard Chinese IVb (Credit/No Credit)

Literature

EAS1137H,Y	Chinese Poetics
EAS1151H	Chinese Poetry I
EAS1152H	Chinese Poetry II
EAS1182H	Writing as Technology in Modern China
EAS1345H	Readings in Japanese Literary Criticism
EAS1408H	Identity and Diaspora in Modern Taiwanese Literature
EAS1417H	Korean Literary Translation
EAS1437H	Mid-century Modernism in the Koreas: Literature, War, and Decolonization
EAS1444H	The City, Body, and Text in Modern Japanese Literature
EAS1467H	Photographic Narratives of Japan
EAS1468H	Mahayana Sutra Literature
EAS1538H	Writing Women in Premodern China
COL5101H	Diasporic Cities: Itinerant Narratives of Metropoles by Travellers and Expatriates

JLA5082H	The Rhetoric of Photography

Philosophy and Religion

POL2416Y	Politics and Society in Contemporary China

Research Seminars

EAS1100H,Y	Special Topics in Chinese Studies
EAS1116H,Y	Special Topics in Chinese Culture
EAS1143H	Topics in Medieval China
EAS1150H,Y	Reading and Major Research Paper
EAS1163H	Special Topics in Korean Studies
EAS1250Y	MA Thesis (Credit/No Credit)
EAS1300H	Special Topics in Japanese Studies
EAS1313Y	Japanese Source Materials and Reference Works
EAS1323Y	Readings in Japanese Documentary Source Materials
EAS1497H	Special Topics in East Asian Studies
EAS1999Y	East Asian Studies Bibliography, Reference, and Research Methodology

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

Kvist, Sebastian - BS, MS
Levine, Joel - BA, PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
MacIvor, Scott - BSc, MSc, PhD
Mandrak, Nicholas - BSc, MSc, PhD
Mason, Andrew - MS, PhD
McCauley, Shannon - PhD
McLennan, Deborah - BSc, PhD
Mideo, Nicole - BSc, PhD
Moncalvo, Jean-Marc - PhD
Murphy, Robert - BSc, MA, PhD
Ness, Robert - BSc, PhD
Ratcliffe, John - BSc, MSc, PhD
Reisz, Robert - BSc, MSc, PhD, FRSC
Rochman, Chelsea - BS, PhD
Rodd, Helen - MSc, PhD
Rollinson, Njal - BSc, MSc, PhD
Rowe, Locke - BSc, MSc, PhD, CRC
Sage, Rowan - PhD
Sage, Tammy - BA, MS, PhD
Short, Steven - BSc, PhD
Sokolowski, Marla - BSc, PhD, CRC
Stefanovic, Sasa - MSc, PhD
Stinchcombe, John - BA, PhD
Sztepanacz, Jacqueline - BSc, MSc, PhD
Thomson, James - MS, PhD
Wagner, Helene - MSc, MSc, PhD
Wang, Yan - BSc, MSc, PhD
Weir, Jason Tyler - AB, PhD
Weis, Arthur - BPhil, PhD
Welch Jr., Ken - BS, MA, PhD
Wright, Stephen - BSc, MS, PhD, CRC ***(Chair and Graduate Chair)***

Members Emeriti

Dengler, Nancy - BA, MS, PhD
Harvey, Harold - MSc, PhD
Morris, Glenn - BSA, MS, PhD
Sprules, Gary - BSc, MA, PhD
Thompson, Paul - BA, MA, PhD

Associate Members

De Kerckhove, Derrick - BSc, MSc, PhD
Dickinson, Timothy - BSc, MSc, PhD
Jeffrey, Melanie - PhD, PhD
Lester, Nigel Paul - BA, MSc, PhD
Ray, Justina - BS, MS, PhD
Ridgway, Mark - MSc, PhD
Shuter, Brian - BSc, MSc, PhD
Somers, Keith - MSc, 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

EEB1210H	Advanced Statistics
EEB1230H	Multivariate Statistics
EEB1250H	Spatial Statistics
EEB1310H	Philosophy and Methods
EEB1315H	Professional Skills Development in EEB
EEB1320H	Ecology
EEB1350H	Evolution
EEB1360H	Special Topics in Behaviour
EEB1420H	Special Topics in Ecology
EEB1423H	Special Topics: Ecology I
EEB1430H	Modelling in Ecology and Evolutionary Biology
EEB1440H	Special Topics in Evolution
EEB1445H	Special Topics: Evolution I
EEB1446H	Special Topics: Evolution II
EEB1450H	Special Topics in Ecology and Evolution A
EEB1451H	Special Topics in Ecology and Evolution B
EEB1452H	Special Topics: Evolution/Ecology Module I
EEB1453H	Special Topics: Evolution/Ecology Module II
EEB1454H	Special Topics: Evolution/Ecology Module III
EEB1455H	Special Topics: Evolution/Ecology Module IV
EEB1456H	Special Topics: Evolution/Ecology Module V

Graduate Courses With Significant Undergraduate Content

These courses will normally constitute only a minor component of the required credits.

EEB1328H	Physiological Ecology
EEB1340H	Comparative Plant Morphology
EEB1443H	Phylogenetic Principles
EEB1459H	Population Genetics
EEB1460H	Molecular Evolution
EEB1462H	Phylogenetic Systematics

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
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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
Burda, Martin - BSc, MA, PhD
Carroll, Gabriel - BA, PhD
Chandra, Ambarish - BMath, MEc, 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 - MEc, PhD
Dyrda, Sebastian - MA, MA, PhD
Eli, Shari - BA, PhD
Gans, Joshua - BEc, PhD
Goldfarb, Avi - BA, MA, PhD
Gourieroux, Christian - PhD
Gu, Jiaying - BA, MSc, PhD
Halevy, Yoram - BA, MA, PhD
Hall, Jonathan - BA, PhD
Hamilton, Gillian - MEc, PhD
Heblich, 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, Ismael - BMath, MSc, PhD
Oreopoulos, Philip - BA, MA, PhD
Osborne, Martin - BA, PhD
Ozkan, Serdar - MEc, 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
Wan, 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 fulfil 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 ECO4060Y^0 *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, fulfil 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 ECO4060Y[0] *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

[0] Course that may continue over a program. The course is graded when completed.

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

ECO1010H	Mathematics and Statistics for MA and MFE Students (Credit/No Credit)
ECO2010H	Mathematics and Statistics for PhD Students (Credit/No Credit)

Core Courses in Economic Theory

ECO1100H	Economic Theory — Macro (for MA students only)
ECO1200H	Economic Theory — Micro (for MA students only)
ECO2100H	Macroeconomic Theory I
ECO2101H	Macroeconomic Theory II (prerequisite: ECO2100H)
ECO2105H	Applied Macroeconomics (co-requisites: ECO2100H and ECO2101H)
ECO2200H	Microeconomic Theory I
ECO2201H	Microeconomic Theory II (prerequisite: ECO2200H)
ECO2205H	Applied Microeconomics (co-requisites: ECO2200H and ECO2201H)

Advanced Microeconomic Theory

ECO3200H	Advanced Microeconomic Theory I (prerequisites: ECO2200H and ECO2201H)
ECO3201H	Advanced Microeconomic Theory II
ECO3202H	Topics in Microeconomic Theory
ECO3210H	Economics of Organizations and Contracts

Behavioural and Experimental Economics

ECO1250H	Topics in Behavioural Economics
ECO3250H	Behavioural Economics

Econometrics

ECO1400H	Econometrics (for MA students only)
ECO1450H	Methods for Empirical Microeconomics (exclusions: ECO439H, ECO2803H)

ECO2400H	Econometrics I
ECO2401H	Econometrics II (prerequisite: ECO1400H or ECO2400H)
ECO2404H	Empirical Applications of Economic Theory (exclusion: ECO418H)
ECO2405H	Applied Econometrics (co-requisites: ECO2400H and ECO2401H)
ECO2411H	Financial Econometrics (exclusion: ECO462H)
ECO2460H	Economic Applications of Machine Learning
ECO3400H	Topics in Econometrics
ECO3401H	Advanced Econometrics
ECO3450H	Advanced Methods for Empirical Microeconomics

Economic Development

ECO1700H	Economic Development
ECO1730H	Economic Development of China (exclusion: ECO435H)
ECO2701H	Advanced Development Economics

Economic History

ECO2750H	Topics in North American Economic History

Financial Economics

ECO1500H	Financial Economics: Asset Pricing (exclusion: ECO419H)
ECO1501H	Financial Economics: Corporate Finance
ECO1502H	Empirical Methods for Financial Economics (exclusion: ECO464H)
ECO1550H	Economics of Financial Risk Management (exclusions: ECO461H, RSM435H)
ECO1551H	Topics in Risk Management

Industrial Organization

ECO1900H	Industrial Organization and Competition Policy
ECO3900H	Industrial Organization I
ECO3901H	Industrial Organization II

International Economics

ECO1300H	International Macroeconomics
ECO1301H	International Financial Markets
ECO2302H	Networks in Trade and Macroeconomics
ECO3300H	International Trade Theory
ECO3301H	International Trade II (prerequisite: ECO3300H)
ECO3302H	Topics in International Trade
ECO3304H	International Monetary Theory

Labour Economics

ECO2802H	Economics Inside Organizations
ECO2804H	Social Economics
ECO3800H	Labour Economics I
ECO3801H	Labour Economics II

Macroeconomics

ECO1102H	Macroeconometric Models for Policy Analysis and Forecasting (exclusion: ECO416H)
ECO2104H	Quantitative Macroeconomics
ECO2107H	Monetary Theory
ECO2120H	Topics in Growth and Development
ECO3100H	Frontiers in Macroeconomics (prerequisites: ECO2100H and ECO2201H)
ECO3101H	Topics in Macroeconomic Theory
ECO3102H	Topics in Business Cycles (exclusion: ECO438H)

Public Economics

ECO2600H	Public Economics I
ECO2601H	Public Economics II
ECO2607H	Economics of Education Policy
ECO2610H	Health Economics
ECO2611H	Empirical Welfare Analysis
ECO2620H	Topics in Health Economics

Other Courses

ECO1320H	International Trade Regulation (exclusions: ECO459H and LAW285H/LAW2038H)
ECO1950H	Economic Analysis of Law
ECO1960H	Energy and Regulation (exclusion: ECO414H)

ECO2650H	Political Economy (exclusion: ECO434H)
ECO2850H	Urban and Regional Economics
ECO4050H	Special Field Reading Course[#]
ECO4051H	Special Field Reading Course#
ECO4060Y[0]	Graduate Research Seminar (Credit/No Credit)

[#] 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;
  - Systems Control
- 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;
- Emphases:
  - Robotics;
  - Sustainable Energy

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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Electrical and Computer Engineering: Graduate Faculty

Full Members

Aarabi, Parham - BASc, MASc, PhD
Abdelrahman, Tarek - BSc, MSc, PhD
Adve, Raviraj - BTech, PhD
Aitchison, J Stewart - BSc, PhD
Amza, Cristiana - BS, MS, PhD
Anderson, Jason Helge - BSc, MASc, PhD
Austin, Lisa - BA, BSc, LLB, MA, Chair in Law and Economics of Intellectual Property
Bardakjian, Berj - BSc, BEd, MASc, PhD
Betz, Vaughn - BSc, MS, PhD
Broucke, Mireille - BScEE, MS, PhD
Brown, Stephen - BSE, MASc, PhD
Chan Carusone, Anthony - BASc, PhD
Chapman, Margaret - PhD
Chau, Tom - PhD
Chechik, Marsha - BS, SM, PhD
Cheng, Hai-Ling - BSc, MS, PhD
Chow, Paul - BASc, MASc, PhD
Dawson, Francis - BSc, BASc, MASc, PhD
de Lara, Eyal - BS, MS, PhD
Draper, Stark - BA, PhD
Eleftheriades, George - DipIng, MSEE, PhD
Enright Jerger, Natalie - BSc, MSc, PhD
Frey, Brendan - BSc, MSc, PhD
Genov, Roman - BS, MS, PhD
Ghassemi, Marzyeh - PhD
Goel, Ashvin - BTech, MS, PhD
Gulak, Glenn - BASc, MSc, PhD
Hatzinakos, Dimitrios - DipIng, MSc, PhD
Helmy, Amr - BSc, MSc, PhD
Herman, Peter - BEng, MSc, PhD
Hooshyar, Ali - BSE, MSc, PhD
Hum, Sean - BSc, MSc, PhD, PEng
Iravani, Reza - BSc, MSc, PhD
Jacobsen, Hans-Arno - MCS, PhD
Johns, David Andrew - BASc, MASc, PhD
Kherani, Nazir - BASc, MASc, PhD
Khisti, Ashish - BASc, PhD
Kschischang, Frank - BASc, MASc, PhD
Kundur, Deepa - BASc, MASc, PhD ***(Chair and Graduate Chair)***
Kwong, Raymond - SB, SM, PhD
Lehn, Peter - BScEE, MSc, PhD
Leon-Garcia, Alberto - BS, MS, PhD
Levi, Ofer - BSc, MSc, PhD
Li, Baochun - BEng, MSc, DPhil
Liang, Ben - BS, MS, PhD
Lie, David - BASc, MS, PhD
Liebeherr, Jorg - DipIng, PhD
Liscidini, Antonio - MSEE, DE
Lo, Hoi-Kwong - BA, MA, MS, PhD
Long, Fan - PhD
Maggiore, Manfredi - MS, PhD
Mann, Steve - BSc, BASc, MSc, PhD
Mojahedi, Mohammad - BSE, MS, PhD ***(Associate Chair, Graduate Studies)***
Moshovos, Andreas - BSc, MS, PhD
Nachman, Adrian - BSc, MA, PhD
Najm, Farid - BE, MSEE, PhD
Ng, Wai Tung - BSc, MASc, PhD
Pavel, Lacra - BEng, PhD
Plataniotis, Konstantinos - DipIng, MS, PhD
Poon, Joyce - BASc, MS, PhD
Popovic, Milos - DipIng, PhD
Prodic, Aleksandar - BS, MSc, PhD
Qian, Li - BASc, MASc, PhD
Rose, Jonathan - BSc, MASc, PhD
Sargent, Edward - BEng, PhD
Sarris, Costas - BE, MS, PhD
Scardovi, Luca - MSc, PhD
Schroeder, Bianca - MSc, PhD
Sejdic, Ervin - PhD
Sheikholeslami, Ali - BSc, MASc, PhD
Simpson-Porco, John - BSc, PhD
Sousa, Elvino - BASc, MASc, PhD
Stumm, Michael - MS, PhD
Tate, Zeb - BS, MS, PhD
Taylor, Josh - BS, SM, PhD
Trescases, Olivier - BASc, MASc, PhD
Triverio, Piero - BScEE, MS, PhD
Truong, Kevin - BASc, PhD
Valaee, Shahrokh - BScEE, MSEE, PhD
Veneris, Andreas - BSc, MSc, PhD
Voinigescu, Sorin - MS, PhD
Wong, Willy - BSc, MSc, PhD
Yoo, Paul - BASc, MSc, PhD
Yu, Wei - BASc, MSEE, PhD
Yuan, Ding - PhD
Zhou, Shurui - PhD
Zhu, Jianwen - BS, MS, PhD

Members Emeriti

Blake, Ian - BASc, MASc, PhD
Bonert, Richard - DipIng, DE
Cobbold, Richard - PhD
Davison, Edward - BASc, MA, PhD, ARCT
Dmitrevsky, Sergi - BASc, AM, MASc, PhD
Iizuka, Keigo - BS, ME, MS, PhD
Kunov, Hans - MSc, PhD
Pasupathy, Subbarayan - BE, MPH, PhD
Salama, Andre - BASc, MASc, PhD
Semlyen, Adam - PhD, PhD
Smith, Kenneth - BASc, MASc, PhD
Smith, Peter - BSc, MSc, PhD
Vranesic, Zvonko - BASc, MASc, PhD
Wonham, Walter - BEng, PhD
Zaky, Safwat - BSc, BSc, MSc, PhD
Zukotynski, Stefan - MASc, PhD

Associate Members

Al Janaideh, Mohammad - PhD
Caldwell, Trevor - PhD
Chisholm, William - BASc, MEng, PhD
Eckford, Andrew - BE, MASc, PhD
Jeffrey, Mark Christopher - PhD, PhD
Lawryshyn, Yuri - DipIng, BASc, MASc, MBA, PhD
Ma, Tom - PhD
Makhzani, Alireza - 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

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.

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 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*
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

APS502H, APS1005H, APS1017H, APS1022H, APS1040H, APS1050H, APS1051H, APS1052H, APS1053H, APS1080H, CHE507H, CHE1108H, CHE1148H, CHE1434H, CIV1504H, CIV1506H, CIV1507H, CIV1532H, CIV1538H, ECE537H, ECE1504H (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1513H), ECE1505H, ECE1510H, ECE1657H, ECE1778H, ECE1779H, MIE562H, MIE1413H, MIE1501H, MIE1512H, MIE1513H, MIE1517H, MIE1620H, MIE1621H, MIE1622H, MIE1623H, MIE1628H, MIE1653H, MIE1721H, MIE1723H, MIE1727H, MSE1063H (exclusion: MSE1065H).

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

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.

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.

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: 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, MIE517H, MIE1128H, 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.

- ECE557H *Systems Control*
- Any ECE16XXH course
- ECE2500Y *Master of Engineering Project* (topic in systems control; counts as one course towards the emphasis).

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

ECE533H	Power Electronics
ECE1030H	Space Vector Theory and Control
ECE1049H	Special Topics in Energy Systems
ECE1055H	Dynamics of HVdc/ac Transmission Systems
ECE1066H	Design of High-Frequency Switch-Mode Power Supplies (SMPS)
ECE1068H	Introduction to EMC
ECE1085H	Power System Optimization
ECE1086H	Power Management for Photovoltaic Systems
ECE1094H	Power System Operations and Economics

Electromagnetics

ECE1228H	Electromagnetic Theory
ECE1229H	Advanced Antenna Theory
ECE1243H	Topics in Electromagnetic Waves
ECE1252H	Introduction to Computational Electrodynamics
ECE1254H	Modeling of Multiphysics Systems
ECE1256H	Microwave Circuits

Electronics

ECE534H	Integrated Circuit Engineering
ECE1334H	Selected Topics in Solid State Electronics/VLSI Technology
ECE1336H	Semiconductor Physics
ECE1352H	Analog Circuit Design I
ECE1360H	Selected Topics in Instrumentation
ECE1365H	High Frequency Integrated Circuits
ECE1371H	Advanced Topics in Analog Circuits
ECE1373H	Digital Design for Systems-on-Chip
ECE1379H	Introduction to Compound Semiconductor Devices
ECE1385H	Selected Topics in VLSI Systems
ECE1387H	CAD for Digital Circuit Synthesis and Layout
ECE1388H	VLSI Design Methodology
ECE1391H	Advanced Microelectronic Devices
ECE1392H	Integrated Circuits for Digital Communications
ECE1393H	Semiconductor Devices
ECE1395H	Power Semiconductor Devices and Applications
ECE1396H	Analog Signal Processing Circuits
ECE1397H	Analog Integrated Circuits
ECE1398H	VLSI Technology

Biomedical Engineering

JEB1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB1433H	Medical Imaging
JEB1444H	Neural Engineering
JEB1447H	Sensory Communications
MIE1452H	Signal Processing for Bioengineering

Photonics

ECE525H	Lasers and Detectors
ECE527H	Passive Photonic Devices
ECE1448H	Quantum Mechanics for Engineers
ECE1450H	Ultrafast Photonics
ECE1460H	Special Topics in Photonics
ECE1461H	Advanced Laser Processing
ECE1467H	Integrated Optical Circuit Design
ECE1473H	Micro and Nano Fabrication Technologies for Compound Semiconductors

ECE1475H	Bio Photonics
ECE1476H	Solar Energy Capture and Storage in Natural and Engineered Systems
ECE1477H	Optical Interconnects
ECE1478H	Lasers and Detectors

Communications

ECE537H	Random Processes
ECE1501H	Error Control Codes
ECE1502H	Information Theory
ECE1503H	Graphs, Error-Correction Coding, and Inference
ECE1504H	Statistical Learning (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, and ECE1513H)
ECE1505H	Convex Optimization
ECE1508H	Special Topics in Communications
ECE1511H	Signal Processing
ECE1512H	Digital Image Processing and Applications
ECE1513H	Introduction to Machine Learning (prerequisites: STA286H or ECE302H or equivalent; exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, and ECE1504H)
ECE1517H	Biometric Systems
ECE1518H	Seminar in Identity, Privacy, and Security
ECE1520H	Data Communications I
ECE1521H	Detection and Estimation Theory
ECE1522H	Data Communications II
ECE1529H	Adaptive Systems for Signal Processing and Communications
ECE1531H	Quantum Information Theory
ECE1541H	Communication Networks I
ECE1542H	Communication Networks II
ECE1543H	Mobile Communications Systems
ECE1545H	Bridges and Routers Planning
ECE1548H	Advanced Network Architectures
ECE1549H	Stochastic Networks
ECE1552H	Modern Mobile Air Interfaces (prerequisite: ECE316H)

Systems Control

ECE557H	Systems Control
ECE1619H	Linear Geometric Control Theory
ECE1635H	Special Topics in Control I
ECE1636H	Control of Discrete-Event Systems I
ECE1637H	Control of Discrete-Event Systems II
ECE1639H	Analysis and Control of Stochastic Systems I
ECE1647H	Introduction to Nonlinear Control Systems
ECE1648H	Nonlinear Control Systems
ECE1653H	Hybrid Systems and Control Applications
ECE1656H	Nonlinear Modeling and Analysis of Biological Systems
ECE1657H	Game Theory and Evolutionary Games

Computer Engineering

ECE516H	Personal Cybernetics and Intelligent Imaging Systems
ECE532H	Digital Hardware
ECE540H	Optimizing Compilers
ECE1718H	Special Topics in Computer Hardware Design
ECE1749H	Interconnection Networks for Parallel Computer Architectures
ECE1754H	Compilation Techniques for Parallel Processors
ECE1755H	Parallel Computer Architecture and Programming
ECE1756H	Reconfigurable Computing and FPGA Architecture
ECE1762H	Algorithms and Data Structures
ECE1767H	Design for Test and Testability
ECE1769H	Behavioural Synthesis of Digital Integrated Circuits
ECE1770H	Trends in Middleware Systems — Selected Topics and Concepts
ECE1771H	Quality of Service
ECE1774H	Sensory Cybernetics
ECE1776H	Computer Security, Cryptography, and Privacy
ECE1777H	Computer Methods for Circuit Simulation
ECE1778H	Creative Applications for Mobile Devices
ECE1780H	Advanced Mobile User Interfaces

ECE1781H	Dependable Software Systems (prerequisite: ECE344H Operating Systems or similar)
ECE1782H	Programming Massively Parallel Multiprocessors and Heterogeneous Systems
ECE1783H	Design Tradeoffs in Digital Systems
ECE1784H	Trustworthy Machine Learning
ECE1785H	Empirical Software Engineering

Master of Engineering

ECE1092H	Smart Grid Case Studies
ECE1093H	Electrical Insulation Design and Coordination
ECE1095H	Grounding and Bonding
ECE1394H	Technical Management of Modern IC Design
ECE1524H	Service Provider Networks
ECE1551H	Mobile Broadband Radio Access Network (prerequisite: ECE316H; exclusion: ECE1508H)
ECE1779H	Introduction to Cloud Computing
ECE2500Y	Master of Engineering Project

Reading Course

ECE1001H	Readings in Cognate Subjects

APS Engineering Course

APS1012H	Managing Business Innovation and Transformational Change
APS1041H	Inventrepreneurship (Invention and Entrepreneurship)
APS1043H	Writing Your Own Patent Application
APS1070H	Foundations of Data Analytics and Machine Learning

English

English: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

English

MA

- Fields:
  - American Literature;
  - Aspects of Theory;
  - Canadian Literature;
  - Creative Writing;
  - Medieval Literature;
  - Renaissance Literature;
  - Restoration and Eighteenth-Century Literature;
  - Romantic and Victorian Literature;
  - Twentieth and Twenty-First Century British and Irish Literature;
  - World Literatures in English

PhD

- Fields:
  - American Literature;
  - Aspects of Theory;
  - Canadian Literature;
  - Medieval Literature;
  - Renaissance Literature;
  - Restoration and Eighteenth-Century Literature;
  - Romantic and Victorian Literature;
  - Twentieth and Twenty-First Century British and Irish Literature;
  - 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
  - English, MA, PhD
- Diaspora and Transnational Studies
  - English, MA, PhD
- Jewish Studies
  - English, MA, PhD
- Sexual Diversity Studies
  - English, MA, PhD
- South Asian Studies
  - English, MA, PhD
- Women and Gender Studies
  - English, MA, PhD
- Women's Health
  - 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.

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English: Graduate Faculty

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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

Harvey, Elizabeth - PhD
Hernandez, Alex - AB, AM, MA, PhD
Hill, Colin - BA, MA, PhD
Jaffe, Audrey - BA, PhD
Kamboureli, Smaro - BA, MA, PhD
Keymer, Thomas - BA, MA, PhD
Kortenaar, Neil ten - BA, MA, PhD
Lamb, Susan - BA, AM, DA
Larson, Katie - BMus, AB, MPH, PhD
Leonard, Garry - BA, MA, PhD
Levene, Mark - BA, MA, PhD
Li, Hao - BA, PhD
Lopez, Jeremy - BA, MA, DPhil
Lynch, Deidre - BA, PhD
Magnusson, Lynne - BA, MA, PhD
Maurice, Alice - BA, DPhil
McGill, Robert - BA, MPH, MA, PhD
Morgenstern, Naomi - BA, MA, PhD
Most, Andrea - BA, MA, PhD
Mount, Nick - AM, PhD
Murray, Heather - BA, MA, PhD
Nyquist, Mary - BA, MA, PhD
Percy, Carol - BA, MA, DPhil
Quayson, Ato - BA, PhD
Radovic, Stanka - PhD
Robins, William - BA, MPH, PhD
Rogers, John - BA, MA, PhD
Rubright, Marjorie - AB, MA, DLitt
Ruti, Mari - BA, MA, PhD
Salih, Sara - BA, DPhil
Schmitt, Cannon - BA, MA, PhD
Seitler, Dana - BA, MA, PhD
Sergi, Matthew - BFA, PhD
Stern, Simon - BA, PhD, JD, Chair in Electronic Commerce
Stevens, Paul - BA, MA, PhD
Suzack, Cheryl - BA, BE, MA, PhD
Switzky, Lawrence - BA, MA, PhD
Syme, Holger Schott - BA, AM, PhD
Vernon, Karina Joan - BA, MA, PhD
Warley, Christopher - BA, MA, DPhil
Weisman, Karen - BA, PhD
White, Dan - BA, AM, DPhil
Williams, Ian - BA, MA, PhD
Woodland, Malcolm - BA, MA, PhD
Wright, Daniel - BA, MA, PhD
Xie, Ming - BA, PhD

Members Emeriti

Adamowski, Thomas - PhD
Allen, Peter - BA, MA, PhD
Asals, Frederick - AB, MA, PhD
Auster, Henry - BA, MA, PhD
Cameron, Elspeth - BA, MA, PhD
Chambers, Douglas - PhD
Cook, Eleanor - PhD
Corman, Brian - AB, AM, PhD
Cuddy-Keane, Melba - BA, MA, PhD
Domville, Eric William - BA, PhD
Duffy, Dennis - AB, MA, PhD
Dutka, JoAnna - BA, MA, PhD, ARCT
Galbraith, David - MA, PhD
Halewood, William - AB, MA, PhD
Hayne, Barrie - BA, AM, PhD
Healey, Antonette - BA, MA, PhD
Henderson, Greig - BA, MA, PhD
Hutcheon, Linda A.M. - BA, MA, PhD
Johnston, Alexandra - PhD
Klausner, David - AB, PhD
Lancashire, Anne - BA, AM, PhD
Lancashire, Ian - BA, MA, PhD
Leggatt, Alexander - BA, MA, PhD
Matus, Jill - BA, MA, PhD
Millgate, Michael - BA, MA, PhD
Saddlemyer, Ann - PhD, DLitt
Sidnell, Michael - BA, MA, PhD
Townsend, David Robert - BA, MA, PhD
Vicari, E. Patricia - BA, MA, PhD
Visser, Colin - BA, BLitt, PhD
Warkentin, Germaine - PhD

Associate Members

Aguila-Way, Tania - BA, MA, PhD
Baker, Deirdre - BA, MA, PhD
Battershill, Claire - PhD
Blayney, Peter - BA, PhD
Chakravarty, Urvashi - BA, PhD
Dooley, Ann - BA, MA, PhD
Mehta, Rijuta - BA, MA, MA, PhD
Michelet Pickavé, Fabienne L. - MPH, LèsL, LittD
Newman, Daniel - DLitt
Raza Kolb, Anjuli - BA, MPH, MA, PhD
Slater, Avery - BA, MA, MPH, MFA, PhD
Teramura, Misha - BA, AM, PhD
Thomas, Anna - BA, MA
Tysdal, Daniel - BA, MA
Walkden, Andrea - MPH, PhD
Walton, Audrey - PhD
Williams, Katherine - BA, MA, PhD
Wilson, Sarah - BA, MA, 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.
- A portfolio consisting of 20 to 25 pages of prose (drama, fiction, or creative non-fiction), and/or poetry. See details about the format of creative writing portfolio submissions.
- 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 ENG6999Y *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*

- ENG6365H *Diasporic Englishes*.
- 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;
  - and 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:

    - ENG6999Y *Critical Topographies: Theory and Practice of Contemporary Literary Studies in English* (1.0 FCE)
    - ENG8000H *Texts, Theories, and Archives* (0.5 FCE)
    - ENG9500H *Professional Development* (0.5 FCE)
    - ENG9900H *Professing Literature* (0.5 FCE)
    - 5.0 additional FCEs in English, as approved by the department. The student must complete ENG6999Y plus 2.0 FCEs in Year 1 of the program, with an average grade of at least an A–. Students must complete all remaining courses, except for ENG9500H *Professional Development*, by the end of Year 3 of the program, with an average of at least an A– in order to maintain good academic standing and to continue in the PhD program. In order to maintain good academic standing, and to continue in the PhD program, the student must complete each course with a grade of at least B.
    - select at least 2.0 FCEs outside the chosen field of study. The student is encouraged to combine these courses in a minor field.
- 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*
    - ENG6365H *Diasporic Englishes*.
- 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 4 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;
    - and 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.

ENG1001H	Old English I
ENG1002H	Introduction to Old English II: Beowulf
ENG1007H	Medieval Drama: Morality Plays
ENG1009H	Writing the Nation: Pre-modern Historiographies
ENG1011H	Economies of Medieval Drama: East Anglia, Kent, Sussex
ENG1025H	Globalization and the Religious Other in Medieval Literature
ENG1027H	Constructions of the Other in Medieval Literature
ENG1333H	Reception of the Classics in Middle English Literature
ENG1551H	The Canterbury Tales
ENG1552H	Chaucer's Troilus and Criseyde and Other Works
ENG1730H	Medieval Drama: The Biblical Cycles and Fragments
ENG2008H	The Early Modern in the History of Science and Literature
ENG2016H	The Queer Renaissance: Queer Studies, Early Modern Texts
ENG2018H	A Royal Society of Their Own: Early Modern Lit/Sci/Phil
ENG2019H	Early Modern Psyches: Shakespeare and Psychoanalysis
ENG2022H	Early Modern Critical Race Studies
ENG2050H	John Donne's Poetic Inhabitations
ENG2054H	John Donne: Theory and Context
ENG2222H	The Renaissance of Art
ENG2226H	Early Modern Manuscripts
ENG2230H	Discourses of Colonialism and Early Modern Literature
ENG2282H	Ben Jonson
ENG2288H	Renaissance Keywords
ENG2464H	Early Modern Literature and the Crisis of Representation
ENG2470H	Milton, Globalism, and the Post-national
ENG2472H	Milton
ENG2484H	Thomas Heywood and the Early Modern Theater
ENG2505H	Shakespeare's Sonnets: Texts and Contexts
ENG2510H	Shakespeare and the Renaissance Schoolroom
ENG2533H	Shakespeare's Language
ENG2535H	Shakespeare and his Contemporaries
ENG3041H	Acting Theory and Practice Before Stanislavsky
ENG3066H	Literatures of British Enlightenment
ENG3070H	Laurence Sterne
ENG3073H	Richardson's Clarissa: Fiction, Contexts, and Criticism
ENG3251H	Varieties of (18th-Century) Religious Experience
ENG3252H	The Postsecular Eighteenth Century
ENG3254H	Fielding and Hogarth
ENG3255H	Fielding's Tom Jones
ENG3301H	The Social Life of Feeling in Eighteenth-Century Literature
ENG3332H	Eighteenth-Century Tragedy and its Discontents
ENG3337H	Comedy and Sentimentality in Eighteenth-Century Literature
ENG3900H	The Circum-Atlantic Novel: Utopia to Mansfield Park
ENG4154H	Wordsworth: Poetry, Context, and Interpretation
ENG4170H	Extravagant Styles: Romanticism, Orientalism, and the Gothic
ENG4211H	Romanticism and Translation
ENG4212H	Romanticism and Catastrophe
ENG4222H	Romanticism and Mobility
ENG4224H	Early Nineteenth-Century Environmental Literature
ENG4235H	Keats: The Poet and His World
ENG4501H	Victorian Fiction and the Fragility of the Social
ENG4502H	Decadent / Pastoral / Fin-de-Siècle
ENG4504H	Darwin and Literature
ENG4622H	Brontë and Dickens
ENG4626H	Literature, Politics, Revolution: Morris and Kingsnorth
ENG4662H	Romantic Memory
ENG4664H	Romantic Pastoral Revisited
ENG4722H	Reparative Readings of Victorian Fiction
ENG4770H	Aesthetics and Ethics: the Late Victorians

ENG4741H	Victorian Lyric
ENG4756H	Class and the Victorian Novel
ENG4801H	Aging and Older Age in the Nineteenth-Century British Novel
ENG4808H	Public Health Stories: Writing Illness in 19th-Century Britain
ENG4856H	Character in 19th-Century Fiction
ENG4879H	Christianity in Victorian Literature
ENG4884H	Everyday Life and 19th-Century Novelistic Representation
ENG4903H	Herman Melville's Democratic Navigations
ENG4904H	Slavery and Anti-Slavery in the Ante-Bellum United States
ENG4973H	Marx and the American Renaissance
ENG4987H	Novelties of the Sublime in Modern Poetry
ENG5005H	Modern Poetry and Philosophy
ENG5006H	Modernism and the Politics of Form
ENG5020H	#BlackLivesMatter: Contemporary Black Canadian Literature
ENG5021H	Black Forms: Critical Race Theory and Diasporic Literature
ENG5022H	Race, Psychoanalysis, and American Literature
ENG5025H	Malcolm X and African-Canadian Literature
ENG5030H	The Child at the Social Limit in Contemporary US Fiction
ENG5042H	Justice and Form in Contemporary Canadian Ecopoetry
ENG5046H	Settler Colonialism and US Literary Studies
ENG5049H	Liberalism, Community, and American Literature
ENG5051H	Energy and Economy in the American Renaissance
ENG5052H	Nineteenth-Century American Literature and Industrial Revolution
ENG5056H	Studies in the 21st-C. Novel: Zadie Smith and David Mitchell
ENG5062H	The Rise of the Transnational American Novel
ENG5064H	Duplicators: The DIY Ethic and DIY Aesthetics in C20-21 Lit
ENG5066H	Realism in the Time of the Anthropocene
ENG5074H	In the First Person: Memoirs and Mediality
ENG5075H	Aesthetics of Struggle: Revolution, Fugitivity, Survival
ENG5130H	Oceanic Modernisms: The Sea and Modernist British Literature
ENG5141H	Staging Environmental Crisis in 21st-Century Canadian Lit
ENG5200H	Woolf/Beckett/Coetzee
ENG5253H	Simply Divine! The Novels of Evelyn Waugh and Graham Greene
ENG5254H	E. M. Forster and His Legacies
ENG5279H	Class and Community in Postwar American Literature
ENG5281H	Whitman and Nationalism 1855-1891/2
ENG5283H	Canadian Animal Stories: Ethics and Aesthetics
ENG5288H	American Literature: Temporality Studies
ENG5300H	Avant-Garde Aesthetics and Politics in Contemporary Poetry
ENG5313H	Poets and Playwrights: Eliot, Stein, Auden
ENG5317H	Amorous Americans: Sexuality and the United States Novel
ENG5464H	Archipelagic American Studies
ENG5524H	Modernism, Modernity, and the Crisis in Temporality
ENG5526H	Monuments of Modernism
ENG5527H	Making and Re-Making Modernism
ENG5555H	Archived Toronto: Literary and Cultural Tracings
ENG5580H	American Pastoral
ENG5717H	The CanLit Boom of the 1960s
ENG5718H	The Books of Coach House Press
ENG5731H	Transitional Justice and Indigenous Writing in Canada
ENG5732H	Visual Sovereignty and the Politics of Reconciliation
ENG5744H	1967: A Year in Letters
ENG5746H	Urban Canadian Literature and Aesthetics of Spatial Justice
ENG5784H	Modernizing Poetry
ENG5799H	Settler-Colonialism and American Indian Writing
ENG5800H	Rooted Cosmopolitanism: the Postcolonial Present
ENG5801H	Kinship in Indigenous Asian Canadian Literatures
ENG5808H	Zones of Contact and South Asian Writing in English

ENG5851H	Faulkner and the American South
ENG5854H	The Global South
ENG5874H	Late James
ENG5905H	Introduction to African-Canadian Literature
ENG5906H	Black Pulp Fiction (& Non-Fiction)
ENG5963H	James Joyce: Modernism, Modernity, Mythology
ENG5988H	Posthuman Encounters in Contemporary Canadian Literature
ENG5991H	Postcolonial Tragedies: Theory, Literature, Criticism
ENG5994H	Modern South Asia in Literature and Media
ENG6010H	Bad Feelings: Between Affect Theory and Psychoanalysis
ENG6011H	Love and Desire in a Time of Crisis
ENG6012H	Forms of Disability
ENG6014H	Adapting Short Fiction
ENG6015H	Experimental Narrative and/as Narrative Theory
ENG6006H	The Age of Anxiety: Theory, Affect, Politics
ENG6032H	The Victorian Novel, Literally
ENG6034H	Old and New Materialisms
ENG6038H	Authors and Their Institutions
ENG6044H	The Literature of Protection
ENG6049H	Intersections/Interventions: Diaspora Studies Today
ENG6054H	Construals of the Self: Autobiography in Africa and the Diaspora
ENG6063H	Novel Theory Now
ENG6064H	The Theory of the Novel
ENG6065H	Repetition in Modern Thought and Culture
ENG6066H	Style: Authorial Signature in the Age of Cyber Technology
ENG6068H	Restaging Shame
ENG6070H	Making Faces: Identity, Performance, and the Face on Film
ENG6100H	Reading Walter Benjamin
ENG6152H	Drama After Performance
ENG6159H	Poststructuralist Poetics
ENG6162H	The Poetics of Melancholy
ENG6163H	The Fate of Culture in an Age of Globalization
ENG6171H	Writing a Journal Article
ENG6181H	Permaculture and Literature
ENG6182H	Eating Well
ENG6199H	Collectivity
ENG6362H	History and Structure of the English Language: Post-1500
ENG6365H	Diasporic Englishes
ENG6490H	The Postcritical Turn
ENG6494H	Psychogeography and the Mapping of Literary Space
ENG6498H	Dystopian Fiction and Unsettled Space
ENG6501H	Life, Death, and American Fiction
ENG6510H	Creative Nonfiction
ENG6517H	Walter Benjamin and His Contemporaries
ENG6519H	Postcolonial Theory and the World Literature Debates
ENG6521H	Literature and Medicine: Corpus, Theory, Praxis
ENG6526H	Postcolonial Poetry
ENG6529H	Critical Animal Studies
ENG6533H	The Art of Mourning
ENG6540H	The Victorian Novel, Literally
ENG6552H	Law and Literature
ENG6553H	Law as Literature: Story and Style in a Culture of Argument
ENG6815H	Artificial Persons
ENG6818H	Social Robots in the Cultural Imagination
ENG6847H	From CanLit to Canlits: The Re-formation of a Literature
ENG6890H	Reading Auerbach's Mimesis
ENG6950Y	Workshop in Creative Writing
ENG6999Y	Critical Topographies: Theory and Practice of Contemporary Literary Studies in English
ENG8000H	Texts, Theories, and Archives
ENG9500H	Professional Development
ENG9900H	Professing Literature
JLE5116H	Naming the World: Realism Travels the Globe
JLE5220H	Tricksters and Confidence Men
JLE5225H	The Passage from History to Fiction

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, MASc, PhD
Andrews, Robert - BASc, MASc, PhD, PEng
Archontitsis, 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
Dei, George J.S. - BA, MA, PhD
Diamond, Miriam - MSc, MSc, PhD
Dittrich, Maria - BES, MSc, PhD
Donmez Akyildiz, Birsen - BS, MS, PhD
Drake, Jennifer Anne Pauline - BEng, MASc, 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
Hatzopoulou, 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, Thembela - MS, PhD
Kesik, Ted - BASc, MASc, DPhil
Klenk, Nicole - BS, MSc, PhD
Kotanen, Peter - BSc, MSc, PhD
Krkosek, 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

Miall, Andrew - BSc, PhD
Miller, Eric - BASc, MASc, PhD
Miller, Fiona - BIS, MA, DPhil
Mitchell, Carl - PhD
Moore, G.W.K. - BSc, PhD
Murphy, Jennifer - BCh, DChem
Murphy, Michelle - BA, PhD
Olive, Andrea - PhD
Passeport, Elodie - MSc, MSc, PhD
Peltier, W. Richard - BSc, MSc, PhD
Poland, Blake - BA, PhD
Prudham, Scott - BASc, BA, MA, PhD
Rochman, Chelsea - BS, PhD
Rodd, Helen - MSc, PhD
Rollinson, Njal - BSc, MSc, PhD
Sage, Rowan - PhD
Sain, Mohini - PhD
Sass-Kortsak, Andrea - BSc, MHSc, PhD
Satsuka, Shiho - BA, BA, MA, PhD
Sawchuk, Lawrence - BA, MA, PhD
Saxe, Shoshanna - MSc, PhD
Scharper, Stephen - BA, MA, PhD
Sherwood Lollar, Barbara - PhD
Simpson, Andre - BSc, PhD
Simpson, Myrna - BS, DPhil
Singh, Neera - BSc, MF, PhD
Skogstad, Grace - DrRerPol
Smith, C. Tattersall - BA, MS, PhD
Smith, Sandy - BAgrSc, MSc, PhD
Soden, Robert - PhD
Soldovieri, Stefan - BA, MA, PhD
Strong, Kimberly - PhD
Swenson, Edward - BA, MA, PhD
Tarlo, Susan - MBBS
Teichman, Judith Ann - BA, MA, PhD
Tozer, Laura Molly - BSc, MA, PhD
Vanderburg, Willem - BASc, MASc, PhD, PEng
Vieta, Marcelo A - BA, MA, PhD
Wakefield, Sarah - BA, MA, PhD
Walsh, Denis - BA, BSc, MPH, PhD, PhD
Wania, Frank - MPH, PhD
Wells, Peter - BScPhm, DP
Windisch, Marianne Touchie - BASc, PhD
Wiseman, Clare L.S. - BES, MSc, ScD ***(Graduate Associate Director)***
Wunch, Debra - BSc, MSc, PhD

Members Emeriti

Aird, Paul - BSc, MS, PhD
Chalin Clark, Catherine - BSN, MA, MDiv, PhD, RN
Greenwood, Brian - BSc, PhD
Holness, D Linn - MHSc, MD
Kenney, Andrew - BSc, MSc, PhD
Michelson, William - AB, AM, PhD
Munro, D Scott - BSc, MSc, PhD
Regier, Henry - BA, MS, PhD
Savan, Beth - BSc, PhD
Stefanovic, Ingrid - BA, MA, PhD
Stren, Richard - BA, MA, PhD
Williams, D Dudley - DipEd, BSc, MSc, PhD, DSc

Associate Members

Arrandale, Victoria - BSc, BS, MSc, MSc, PhD, PhD
Bowman, Kerry - BA, BSW, MSW, PhD
Green, Andrew - LLB, BA, LLM, MA, PhD, Metcalf Chair in Environmental Law
Ing, Karen - MS
Jeffrey, Melanie - PhD, PhD
Macdonald, Douglas - PhD
Maddalena, Damian - BS, MS, MA, PhD
Murck, Barbara - AB, PhD
Ratto, Matt - PhD
Smith, Karen Louise - BSc, MASc, MASc, PhD
Wagner, Helene - MSc, MSc, PhD
Wilson, Kathleen - AB, AM, PhD
Woodland, Cindy - PhD
Yoreh, Tanhum - 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 focussed, rather than discipline-focussed, 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):

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)
ENV1199Y	Thesis (pending approval)

Elective Courses

1.5 FCEs chosen from one of the following concentrations:

Concentration 1: Adaptation and Resilience

CHL5413H	Public Health Sanitation
CHL5903H	Environmental Health
CHL5911H	Occupational and Environmental Hygiene II
CSC2720H	Systems Thinking for Global Problems
EES1136H	Climate Change Adaptation
ENV1001H	Environmental Decision Making
ENV1004H	Urban Sustainability and Ecological Technology (pending approval)
ENV1703H	Water Resources Management and Policy
ENV1704H	Environmental Risk Analysis and Management
ENV4002H	The Environment and Health of Vulnerable Populations (pending approval)
ESS2304H	Contaminants in the Environment
FOR1416H	Forest Fire Danger Rating
FOR1575H	Urban Forest Conservation
JGE1413H	Workshop in Environmental Impact Assessment
JGE1420H	Urban Waste Management: an International Perspective
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JNC2503H	Environmental Pathways
JPG1404H	Issues in Global Warming
JPG1428H	Greening the City: Urban Environmental Planning and Management
PLA1601H	Climate Change and Resilience: Planning and Policy

Concentration 2: Global Change Science

ANT4065H	Specific Problems: New World
CHE1435H	Fundamentals of Aerosol Physics and Chemistry
CHM1401H	Transport and Fate of Chemical Species in the Environment
CHM1410H	Analytical Environmental Chemistry
CHM1420H	Environmental Chemistry of Soil
CHM1425H	Modelling the Fate of Organic Chemicals in The Environment
ENV1001H	Environmental Decision Making
ESS1461H	Paleoenvironmental Studies
ESS2303H	Earth Systems Evolution
FOR3000H	Current Issues in Forest Conservation
PHY1498H	Introduction to Atmospheric Physics
PHY2502H	Climate System Dynamics
PHY2504H	Advanced Atmospheric Dynamics
PHY2505H	Atmospheric Radiative Transfer and Remote Sounding
PHY2506H	Data Assimilation and Retrieval Theory

Concentration 3: Social Sustainability

ANT3034H	Advanced Research Seminar IV
ANT6018H	Approaches to Nature and Culture
DRA3903H	Topics in Theatre, Drama, and Performance
ENV1001H	Environmental Decision Making
ENV1008H	Worldviews and Ecology
ENV1444H	Capitalist Nature
ENV1701H	Environmental Law
ENV4001H	Graduate Seminar in Environment and Health
ENV4002H	The Environment and Health of Vulnerable Populations (pending approval)
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JPG1426H	Natural Resources, Difference, and Conflict
JPG1518H	Sustainability and Urban Communities
JPG1672H	Land and Justice
LHA1104H	Social Action Education — Community Development, Social Services, and Social Movements
LHA1160H	Introduction to Transformative Learning Studies
LHA1193H	Adult Education for Sustainability
LHA1837H	Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing
POL2173H	Environmental Politics in Canada
POL2213H	Global Environmental Politics
SJE1909H	Environmental Sustainability and Social Justice I

Concentration 4: The Sustainability Transition

CIV1307H	Life Cycle Assessment and Sustainability of Engineering Activities
ENV1001H	Environmental Decision Making
ENV1002H	Environmental Policy
ENV1003H	Global Climate Politics and Policy (pending approval)
ENV1444H	Capitalist Nature
ENV1707H	Environmental Finance and Sustainable Investing
FOR1270H	Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier
FOR1288H	Design and Manufacturing of Biomaterials
FOR1294H	Bioenergy and Biorefinery Technology
GGR1407H	Efficient Use of Energy (exclusion: GGR347H1)
GGR1408H	Carbon-Free Energy (exclusions: GGR1406H, GGR348H1)
JFG1610H	Sustainable Forest Management and Certification
JPG1518H	Sustainability and Urban Communities

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
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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
Ornston, 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

Cohen, Paul - AM, PhD
Gunitskiy, Vsevolod - BA, MA, MPH, PhD
Hartblay, Cassandra Sarah - BA, MA, PhD
Jennings, Eric - BA, MA, PhD
Kahraman, Filiz - BA, MA, PhD
Kalmar, Ivan - BA, MA, PhD
Kasekamp, Andres - PhD
Korteweg, Anna - BA, MA, PhD
Light, Matthew - BA, MA, JD, PhD
Manger, Mark - DrRerPol
Methodieva, Milena - PhD
Reisenbichler, Alexander - BA, MA, PhD
Sayle, Timothy - AM, MPA, PhD
Schatz, Edward - PhD
Shternshis, Anna - MA, PhD
Topouzova, Lilia - BA, MA, PhD
Way, Lucan Alan - BA, PhD
Wilson, David - BA, MA, 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

ERE2000Y	Research Seminar

ERE2001H	Gateway Proseminar in European, Russian, and Eurasian Studies

Elective

ERE1151H	European Studies
ERE1161H	Topics in Russian and Eurasian Studies
ERE1162H	Topics in the Caucasus
ERE1165H	International Internship (Credit/No Credit)
ERE1170H	Conflicts and Para-States in the European Union's Backyard
ERE1175H	One Hundred Years of Cultures of Refugees in Europe, 1920–2020
ERE1179H	Illiberalism in East-Central Europe
ERE1186H	The Past As Prologue: East Central and Southeastern Europe in the Interwar Period
ERE1195H	Topics in Ukraine and Eastern Europe
ERE1197H	Reading Course

Anthropology

For a full listing of courses, see the Anthropology entry in this calendar.

ANT6021H	Political Anthropology: State, Power, and Sovereignty
JSA5147H	Language, Nationalism, and Post-Nationalism

Comparative Literature

For a full listing of courses, see the Comparative Literature entry in this calendar.

COL5037H	Magic Prague: Questions of Literary Cityspaces
COL5047H	The Two Avant-Gardes
JGC1855H	Critical Theory in Context: The German-French Connection
JHL1282H	Comparative Totalitarian Culture
JLV5134H	Theories of the Novel

Criminology and Sociolegal Studies

For a full listing of courses, see the Criminology and Sociolegal Studies entry in this calendar.

CRI3130H	Policing
CRI3220H	Organized Crime and Corruption

Germanic Languages and Literatures

For a full listing of courses, see the Germanic Languages and Literatures entry in this calendar.

GER1722H	Kafka
GER1780H	Topics in German Visual Culture
GER6000H	Reading German for Graduate Students
JGC1855H	Critical Theory in Context: The French-German Connection

History

For a full listing of courses, see the History entry in this calendar.

HIS1032H	Modernity and Its Visual Cultures
HIS1200H	Readings in European Intellectual History
HIS1237H	France: 1870–1968
HIS1268H	The Holocaust and World War II
HIS1272H	Topics in Twentieth-Century European History
HIS1275H	Imperial Germany, 1871–1918
HIS1281H	History of Real Socialism
HIS1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS1290H	Topics in Imperial Russian History
HIS1293Y	Kievan Rus' (joint graduate/undergraduate)
HIS1296H	Stalinism and After: Beyond Cold War History
HIS1805H	Human Rights and Empire (exclusion: HIS1860H)
JHL1282H	Comparative Totalitarian Culture
JHP1289Y	Twentieth-Century Ukraine (joint graduate/undergraduate)

Near and Middle Eastern Civilizations

For a full listing of courses, see the Near and Middle Eastern Civilizations entry in this calendar.

JNE2320H	Modern Turkey

Political Science

For a full listing of courses, see the Political Science entry in this calendar.

JHP2351Y	The People From Nowhere
JRA2321H	Topics in Comparative Politics
JRA2337H	Government Law and Politics in Russia
POL2207H	Topics in International Politics III
POL2226H	Ethics and International Relations
POL2240H	Geopolitics of Cyberspace
POL2321H	Topics in Comparative Politics I
POL2326H	Democracy and Dictatorship
POL2335H	Business and Politics: Power in a Global World

Slavic Languages and Literatures

For a full listing of courses, see the Slavic Languages and Literatures entry in this calendar.

Croatian and Serbian Literatures

SLA1517H	Modern Serbian Bards
SLA1547H	South Slavic Folklore

Czech and Slovak Literatures

SLA1610H	V. Havel: Thinker, Politician, Writer

Polish Literature

SLA1304H	Transgressions: Drama, Theatre, Performance
SLA1308H	Critical Paradigms in Polish Culture
SLA1312Y	Modernism and Postmodernism in Polish Literature

Russian Literature

SLA1202H	Gulag Literature
SLA1203H	The Self and Other in Russian Prose
SLA1204H	Contemporary Russian Literature
SLA1207H	The Imaginary Jew
SLA1211Y	Studies in the Russian Drama: Eighteenth to Twentieth Century
SLA1215H	Studies in Russian Literature and Criticism in the Eighteenth Century
SLA1216H	From English to Russian Literature and Back
SLA1218H	Pushkin
SLA1220H	Nineteenth Century Russian Thinkers
SLA1225H	Russian Literature in the Age of Empire
SLA1226H	Dostoevsky in Literary Theory and Criticism
SLA1228H	Themes in Russian Realism
SLA1231H	Russian Modernism
SLA1238H	Chekhov
SLA1239H	Vladimir Nabokov
SLA1240H	Tolstoy
SLA1410H	Gogol
SLA1411H	Synthesis of Arts in the Late Russian Empire-Early Soviet Union

Ukrainian Literature

SLA1402Y	Studies in Ukrainian Modernism
SLA1403Y	Contemporary Ukrainian Literature
SLA1404Y	Studies in Ukrainian Poets
SLA1406Y	Studies in Ukrainian Literary Criticism
SLA1407H	Aspects of Literary Translation of Ukrainian

General Slavic

SLA1010H	Slavic Proseminar
SLA1039H	Kyiv-Kiev-Kijow: A City and the Text
SLA1320H	Postcommunism — Postcolonialism — Postdependence: Central and Eastern European Perspectives
SLA1421H	Women in East European Fiction
SLA1521H	Post-Modernity and the Mythopoetic Legacy of Mitteleuropa

Reading and Research Courses

ERE1997H	Reading and Research
ERE1998H	Reading and Research I
ERE1999H	Reading and Research II

Financial Economics

Financial Economics: Introduction

Faculty Affiliation

Arts and Science; Management

Degree Programs

Financial Economics

MFE

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

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Telephone: (416) 978-2678

Master of Financial Economics Program
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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

Master of Financial Economics

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 - BAgrSc, 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 - BEc, MEc, 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

Smith, Margaret Anne (Peggy) - BSc, PhD
Stocks, Brian - BScF, MScF
Thiffault, Nelson - BS, PhD
Timms, Laura L. - BSc, MScF, PhD
Tjong, Jimi - BASc, MASc, PhD
Wang, Sen - BA, MSc, PhD
Webster, Kara L. - BSc, MSc, PhD
Wetzel, Suzanne - BScF, PhD
Wilson, Edward - BScF, BScF, BMedSc
Woolford, Douglas - BSc, MMath, PhD
Wyatt, Stephen - BScF, 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:
  - 6.0 required FCEs in FOR courses.
  - 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:
  - **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*
  - **Year 1: Spring**
    - FOR3004H *Forest Management Decision Support Systems*
    - FOR3005H *Stresses in the Forest Environment*
    - FOR3009H *Forest Conservation Biology*
    - FOR3010H *Society and Forest Conservation*
  - **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)
  - **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* **or**, 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* **or**, 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

12 sessions

Time Limit

6 years

Forestry: 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)

Time Limit

3 years full-time

Forestry: Forestry PhD

Doctor of Philosophy

Program Description

The PhD 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 backgrounds including forestry; applied science and engineering; and social, physical, and biological sciences.

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 MScF 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 Graduate Department of Forestry's additional admission requirements stated below.
- Applicants may be admitted to the four-year PhD program via completion of an appropriate master's degree from a recognized university with at least an A- standing, in a discipline appropriate to the intended field of doctoral study and research.
- Applicants must submit additional documentation to the department with 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

- Successful completion of **2.0 full-course equivalents (FCEs)** as follows:
  - 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.

    - 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

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:
    - 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.
    - 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 resumé, and a writing sample. See the full instructions and forms.

Program Requirements

- Successful completion of **2.0 full-course equivalents (FCEs)** as follows:
    - 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.
    - 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

studies course taken with a student's supervisor can be credited towards meeting departmental degree program requirements.

FOR1001H[0]	Graduate Seminar (Credit/No Credit)
FOR1270H	Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier
FOR1288H	Design and Manufacturing of Biomaterials
FOR1294H	Bioenergy and Biorefinery Technology
FOR1412H	Natural Resource Management I (Directed Studies Course)
FOR1413H	Natural Resource Management II (Directed Studies Course)
FOR1416H	Forest Fire Danger Rating
FOR1575H	Urban Forest Conservation
FOR1585H	Urban Forest Conservation Field Camp
JFG1610H	Sustainable Forest Management and Certification
FOR1900H	Advanced Topics in Forestry I (Directed Studies Course)
FOR1901H	Advanced Topics in Forestry II (Directed Studies Course)
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
FOR3011H	International Forest Conservation Field Camp (Credit/No Credit)
FOR3012H	Analytical Methods in Forestry
FOR3013H	Urban and Community Forestry: Leadership and Professional Practice

[0] 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

Brousseau, 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

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'Neill-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
Kirouac 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

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**

    - 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

French Language and Literature: French Language and Literature MA; Field: French Literature

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 literary studies 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 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 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 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.

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);
        - 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.
- **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.

    - 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.

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 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.
- **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 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 3, 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 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 MA, PhD Courses

Not all courses are offered every year. Please consult the department regarding course availability.

Core Courses

Linguistics Courses

FRE1103H	Séminaire de linguistique I : Phonétique et phonologie
FRE1104H	Séminaire de linguistique II : Syntaxe
FRE1141H	Séminaire de linguistique III : Linguistique expérimentale et linguistique de corpus

Literature Courses

FRE1202H	Séminaire de littérature 1 : théorie
FRE1203H	Séminaire de littérature 2 : période
FRE1204H	Séminaire de littérature 3 : genre

Linguistic and Literature Courses

FRE1201H	Méthodes de recherche (Credit/No Credit — for PhD students only)

Elective Courses

Not all courses are offered every year. Please consult the department regarding course availability.

Linguistics Courses

FRE1002H+	Advanced Oral and Written French for Academic Purposes
FRE1128H	Le français en contact
FRE1132H	Problèmes de phonologie : les créoles à base lexicale française
FRE1136H	Arguments, structures et représentations en français
FRE1137H	Les mots complexes : études de cas en morphologie
FRE1138H	Bilinguisme et acquisition du langage
FRE1141H	Séminaire de linguistique III — Linguistique expérimentale et linguistique de corpus
FRE1143H	The Evolution of the French Language in Society Throughout the Centuries

FRE1144H	DP Structure and Adjunct Linearization in French and English
FRE1145H	La variation linguistique en français hexagonal
FRE1146H	Acquisition of Sociolinguistic Competence in L2 French
FRE1147H	Questions et réponses : aspects syntaxiques, phonologiques et discursifs (prerequisites: FRE1104H, FRE1141H)
FRE1148H	Les sujets postverbaux en français (et au-delà) (prerequisite: FRE1104H)
FRE1149H	Outils computationnels pour linguistes
FRE1164H	Initiation au français médiéval

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

Literature Courses

FRE1612H	Satire et parole libre dans la littérature des XVIe et XVIIe siècles
FRE1613H	Les récits de voyage dans la littérature française des XVIe et XVIIe siècles
FRE1614H	Le roman aux XVIe et XVIIe siècles
FRE1615H	Littérature française et philosophie
FRE1815H	Théorie de l'histoire
FRE1901H	Le récit de voyage au XIXe siècle
FRE1905H	Baudelaire et la modernité symboliste (1850–1900)
FRE1906H	Théories du rire et analyse littéraire du genre comique
FRE1928H	Zola et le naturalisme : du « roman exprimental » au « roman nouveau »
FRE2004H	Formes et voies romanesques de l'extrême contemporain
FRE2007H	Littérature et éthique : nouveaux textes, nouvelles problématiques
FRE2011H	Écrire l'athéisme. perspectives littéraires et philosophiques
FRE2024H	Altérité et représentation : littératures d'Afrique et des Caraïbes
FRE2035H	Autour de l'intime en France: les écrits contemporains des femmes
FRE2036H	Configurations du genre sexuel dans la prose contemporaine des femmes
FRE2037H	Écriture et folie
FRE2039H	Roman et critique sociale aux XXe et XXIe siècles
FRE2041H	Mémoires (Post)coloniales
FRE2042H	Intertextualité
FRE2078H	Altérité : formes et significations
FRE2079H	Le Roman postmoderne
FRE2100H	Du texte à l'image : Images photographiques et cinématographiques dans quelques textes contemporains
FRE2102H	Enjeux des productions culturelles autochtones de langue française au Canada
FRE2105H	Écritures du moi: de la représentation textuelle à la représentation visuelle du sujet écrivant
FRE2107H	Le récit fantastique québécois : formes et transformations
FRE2109H	Histoire des pratiques littéraires et culturelles des femmes au Québec (1830–1960)
FRE2202H	Littérature et presse au Québec (XXe–XXIe siècles)

Other Courses

FRE4000Y	Reading Course
FRE4001H	Reading Course
FRE5000Y[0]	Research Essay (MA)
FRE5001H[0]	Research Essay (MA)

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

Joint Courses

JFC1813H	Littérature de contact et pensée anthropologique en France du XVIe au XVIIIe siècle / Literature of Contact and Anthropological Thought, 16th–18th Century
JFC5025H	Feminism and Postmodernism: Theory and Practice
JFC5056H	Autobiography, Photography, Narrativity
JFC5105H	Collections of Knowledge: Encyclopedism and Travel Literature in Early Modern Europe (1500–1800)
JFC5120H	The Gift: Stories of a Paradigm
JFC5129H	Performative Autobiographical Acts: Painted and Photographic Representations of Self in Personal and Political Testimonials
JFC5136H	Allegory and Allegorism in Literature and Fine Arts

JFF1100H	Surréalisme et cinéma / Surrealism and French Cinema
JFF1101H	The Art of Exploration: How to Think the World
JRL1111H	Second Language Acquisition of Romance Phonology

Cross-Listed Courses

Book History and Print Culture

BKS1001H	Introduction to Book History
BKS1002H	Book History in Practice
BKS2000H	Advanced Seminar in Book History and Print Culture

Medieval Studies

MST3232H	Vernacular Literature in Medieval Europe: Status and Function
MST3154H	Book History and Print Culture
MST3155H	Middle French Literature

Sexual Diversity Studies

SDS1000H	Theoretical and Methodological Issues in Sexual Diversity Studies

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
- Environmental Studies
  - Geography, MA, MSc, PhD
  - Planning, MScPl, 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

MSc Planning program telephone: (416) 946-0269
Fax: (416) 946-3886

Department of Geography and Planning
University of Toronto
Sidney Smith Hall
5th Floor, 100 St. George Street
Toronto, Ontario M5S 3G3
Canada

Geography and Planning: Graduate Faculty

Full Members

Abizaid, Christian - MA, PhD
Archontitsis, 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, Susannah - BA, MES, PhD
Caspersen, John - BA, PhD
Chen, Jing - BSc, PhD
Conway, 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
Goonewardena, 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, MASc, 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
Siemiatycki, 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, Mathew - 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
Brail, 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, Jue - 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 (RST9999Y), 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

Time Limit

3 years full-time;
6 years 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:
    - 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 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

Geography and Planning: Geography PhD Fields: 1) Environmental Geography and Resource Management; 2) Historical/Social/Cultural Geography; 3) Urban/Economic Geography

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:
    - 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 not more than 1.5 FCE courses in other departments.
    - 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 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 appropriate bachelor's degree from a recognized university.

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:
    - 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. Failure of the second exam may result in a recommendation for termination from the program.
- Acquire knowledge of a **foreign language** necessary for the 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

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

GGR1105H	Human Geography Core Course
GGR1110H	Issues in Geographic Thought and Practice
GGR1200H	Physical Geography Core Course

Research Methods Courses

GGR1111H	Social Research Methods
JPG1120H	Advanced Qualitative Research: Methodology and Epistemological Foundations for Planning and Geography
JPG1140H	Discourse Analysis Methodology
JPG1170H	Statistical Testing and Analysis
GGR1218H	Quantitative, Open-Source Methods in Physical Geography Research
JPG1400H	Advanced Quantitative Methods

Individual Topics Courses

GGR1149H,Y	Readings in Selected Topics
GGR2149H,Y	Readings in Selected Topics
GGR2150H,Y	Advanced Seminar in Selected Topics
JPG2150H	Advanced Seminars in Selected Topics
GGR2151H	Advanced Seminars in Selected Topics II
JPG2151H	Advanced Seminars in Selected Topics II

Environmental and Resource Geography

GGR1404H	Global Warming (exclusion: GGR314H1)
GGR1406H	Energy Supply and Use (exclusion: GGR333H1)
GGR1407H	Efficient Use of Energy (exclusion: GGR347H1)
GGR1408H	Carbon-Free Energy (exclusions: GGR1406H, GGR348H1)
GGR1411H	Nature and Justice in the Anthropocene
JGE1413H	Workshop in Environmental Impact Assessment
JPG1421H	Health in Urban Environments
GGR1422H	The Geography of Urban Air Pollution
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JPG1426H	Natural Resources, Difference, and Conflict
JPG1427H	The (Re)Localization of Food Production: Debates and Controversies
JPG1428H	Greening the City: Urban Environmental Planning and Management
JPG1429H	Political Ecology of Food and Agriculture
JFG1610H	Sustainable Forest Management and Certification

Geographical Information Analysis

JPG1906H	Geographic Information Systems
JPG1909H	Advanced GIS Data Processing
GGR1911H	Remote Sensing (exclusions: GGR337H1, GGR437H1, GGR1912H)
GGR1912H	Advanced Remote Sensing (exclusions: GGR337H1, GGR437H1, GGR1911H)
JPG1914H	Geographic Information Systems Research Project (exclusion: GGR462H1)
GGR1916H	Remote Sensing of Vegetation Traits and Function (exclusion: GGR414H1S)
GGR1921H	Land/Geographic Information Systems

Historical, Social, and Cultural Geography

JPG1503H	Space, Time, Revolution
JPG1506H	State/Space/Difference: Understanding the New Social Geography of the State
JPG1511H	The Commons: Geography, Planning, Politics
JPG1520H	Contested Geographies of Class-Race Formations
JPG1672H	Land and Justice
GGR1705H	Historical Geographies of Modernity
JPG1706H	Violence and Security
GGR1714H	Geographies of Citizenship
JPG1804H	Space, Power, and Geography: Understanding Spatiality
JPG1805H	Transnationalism, Diaspora, and Gender

GGR1807H	Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'
JPG1809H	Spaces of Work: Value, Identity, Agency, Justice
GGR1811H	Troubling Militarism: Space, Affect, Economy
JPG1812Y	Planning for Change: Community Development in Practice
JPG1813H	Planning and Social Policy
JPG1815H	Political Economy, the Body, and Health
GGR1816H	Geographies of Secularism, Islam, and Gender
JPG1818H	The Geography and Planning of Climate Action and Activism
GGR1821H	China Development Seminar
GGR1822H	Queer Geographies
JPG1825H	Black Geographies of the Atlantic
JPG1830H	Utopia/Dystopia
GGR1832H	Geographies of Decolonization and Liberation
JPG1835H	Anti-Colonial Planning: Theory and Practice

Physical Geography

GGR1202H	Sedimentation and Fluvial Geomorphology (exclusion: GGR301H)
GGR1215H	Advanced Watershed Hydroecology (exclusion: GGR413H1)
GGR1216H	Advanced Biogeochemical Processes (exclusion: GGR406H1)
GGR1217H	The Climate of the Arctic (exclusion: GGR484H1)
GGR1302H	Advanced Hydrology and Water Quality (exclusion: GGR407H1)
GGR1315H	The Cryosphere (exclusion: GGR317H1)

Urban and Economic Geography

JPG1502H	Global Urbanism and Cities of the Global South
JPG1504H	Institutionalism and Cities: Space, Governance, Property and Power
JPG1507H	Housing Markets and Housing Policy Analysis
JPG1512H	Place, Politics, and the Urban
JPG1516H	Declining Cities
JPG1518H	Sustainability and Urban Communities
JPG1554H	Transportation and Urban Form
JPG1558H	The History and Geography of Cycles and Cycling
JPG1605H	The Post-Industrial City
JPG1607H	Geography of Competition
JGE1609H	Cities, Industry, and the Environment
GGR1610H	Geography of Finance and Financial Crisis
JPG1615H	Planning and the Social Economy
JPG1616H	The Cultural Economy
JPG1617H	Organization of Economies and Cities
JPG1621H	Innovation and Governance
JPG1660H	Regional Dynamics
JPG1670H	Regional Economic Analysis
JPG1814H	Cities and Immigrants
JPG1820H	Disability and the City

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:

        - 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 MScPl, 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

PLA1101H	Planning History, Thought, and Practice
PLA1102H	Planning Decision Methods I
PLA1103H	Legal Basis of Planning
PLA1105H	Planning Decision Methods II
PLA1106H	Workshop in Planning Practice
PLA1107Y	Current Issues Paper
PLA1520H	Project Management and Conflict Resolution for Planners

Core Courses for the PhD in Planning

GGR1111H	Social Research Methods (or a methods course in a related department subject to the approval of the supervisor)
PLA2000H	Advanced Planning Theory
PLA2001H	Planning Colloquium (Credit/No Credit)

Elective Courses

JPG1120H	Advanced Qualitative Research: Methodology and Epistemological Foundations for Planning and Geography
JPG1140H	Discourse Analysis Methodology
JPG1170H	Statistical Testing and Analysis
PLA1149H	Independent Study
JPG1400H	Advanced Quantitative Methods
JGE1413H	Workshop in Environmental Impact Assessment
JPG1416H	Environmental Consequences of Land Use Change
JPG1418H	Rural Land Use Planning
JGE1420H	Urban Waste Management: an International Perspective
JPG1426H	Natural Resources, Difference, and Conflict
JPG1427H	The (Re)Localization of Food Production: Debates and Controversies
JPG1428H	Greening the City: Urban Environmental Planning and Management
JPG1429H	Political Ecology of Food and Agriculture
JPG1502H	Global Urbanism and Cities of the Global South
JPG1503H	Space, Time, Revolution
JPG1504H	Institutionalism and Cities: Space, Governance, Property, and Power
JPG1506H	State/Space/Difference: Understanding the New Social Geography of the State
JPG1507H	Housing Markets and Housing Policy Analysis
PLA1510H	Special Topics in Planning
JPG1511H	The Commons: Geography, Planning, Politics
JPG1512H	Place, Politics, and the Urban
PLA1514H	The Role of the Planner
JPG1516H	Declining Cities
PLA1516H	Special Topics in Planning II
PLA1517H	Special Topics in Planning III
JPG1518H	Sustainability and Urban Communities
PLA1518H	City Building — Practice and Experience in Toronto and Other World Cities
PLA1519H	Planning and Governance
JPG1520H	Contested Geographies of Class-Race Formations
PLA1520H	Project Management and Conflict Resolution for Planners
PLA1525H	Urban, Regional, and Community Economic Development
PLA1551H	Policy Analysis
PLA1552H	City Planning and Management
JPG1554H	Transportation and Urban Form
JPG1558H	The History and Geography of Cycles and Cycling
PLA1601H	Climate Change and Resilience: Planning and Policy
JPG1605H	The Post-Industrial City
JPG1607H	Geography of Competition
JPG1615H	Planning and the Social Economy
JPG1616H	The Cultural Economy
JPG1617H	Organization of Economies and Cities
JPG1621H	Innovation and Governance
PLA1650H	Urban Design: History Theory Criticism
PLA1651H	Planning and Real Estate Development
PLA1652H	Introductory Studio in Urban Design and Planning
PLA1653H	Advanced Studio in Urban Design and Planning
PLA1654H	Urban Design Research Methods
PLA1655H	Urban Design and Development Controls

PLA1656H	Land Use Planning: Principles and Practice
JPG1660H	Regional Dynamics
JPG1670H	Regional Economic Analysis
JPG1672H	Land and Justice
PLA1702H	Pedestrians, Streets, and Public Space
PLA1703H	Transportation Planning and Infrastructure
JPG1706H	Violence and Security
PLA1801H	Urban Infrastructure Planning
JPG1804H	Space, Power, and Geography: Understanding Spatiality
JPG1805H	Transnationalism, Diaspora, and Gender
GGR1807H	Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'
JPG1809H	Spaces of Work: Value, Identity, Agency, Justice
JPG1810H	Globalization and Postmodernism
JPG1812Y	Planning for Change: Community Development in Practice
JPG1813H	Planning and Social Policy
JPG1814H	Cities and Immigrants
JPG1818H	The Geography and Planning of Climate Action and Activism
JPG1820H	Disability and the City
JPG1825H	Black Geographies of the Atlantic
JPG1830H	Utopia/Dystopia
JPG1835H	Anti-Colonial Planning: Theory and Practice
JPG1906H	Geographic Information Systems
JPG1909H	Advanced GIS Data Processing
JPG1914H	Geographic Information Systems Research Project (exclusion: GGR462H1)
JPG2150H	Advanced Seminars in Selected Topics
JPG2151H	Advanced Seminars in Selected Topics II
PLA4444H	Internship (Credit/No Credit) (Designates the internship to be undertaken by master's students in the Planning program. It cannot be used to fulfil other course requirements for the degree.)

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 enrolment 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, MA, PhD

Members Emeriti

Dierick, Augustinus - BA, MA, PhD
Hempel, Wolfgang - PhD
Mayer, Hartwig - PhD, PhD
Saas, Christa - BA, MA, PhD
Seliger, Helfried - PhD

Associate Members

Bergen, Doris - MA, PhD
Budde, Antje - PhD
Clark, Caryl - BMus, MA, PhD
Cohen, Adam - PhD
Comay, Rebecca - BA, MA, PhD
DiCenso, James - BA, MA, PhD
Esterhammer, Angela - BA, PhD
Gibbs, Robert - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Kaplan, Louis - AB, AM, DPhil
Kim, Hang-Sun - AB, MA, PhD
Lahusen, Thomas - MA, PhD
Levy, Evonne - MFA, PhD
Retallack, James - BA, DPhil
Revermann, Martin - PhD
Seidman, Naomi - PhD
Wittmann, Rebecca - AB, MA, 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.
- Applicants to the one-year MA program in the field of German Literature, Culture and Theory must have completed 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 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)
  - 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 2.0 FCEs in Yiddish literature and culture or another area of Jewish Studies, 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 and upon the evidence of the supporting letters.

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/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

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.

GER1000H	German Studies Seminar: Culture, Theory, Text
GER1050H	Methods and Texts in Yiddish Studies

GER1051Y	Yiddish Language and Literature for German Speakers
GER1200H	Middle High German
GER1210H	Medieval German Romance: Tristan und Isolde
GER1220H	Medieval Arthurian Romance
GER1480H	Goethe's Faust
GER1485H	Goethe's Novels
GER1490H	Topics in German Literary Studies
GER1540H	Revolutions
GER1550H	Origins: Myths of Beginning in German Literature and Thought
GER1661H	Modernism in Context
GER1690H	Theatre in the Weimar Republic
GER1722H	Kafka
GER1730H	Travel Writing
GER1770H	Reviewing the 50s: German Cinemas under Reconstruction
GER1771H	Topics in German Cinema Studies
GER1775H	Cinemas of Migration
GER1780H	Topics in German Visual Culture
GER1785H	Remaking the Movies in German Cinemas
GER1820H	The Learning and Teaching of German
GER1821H	Reading Course in Second Language Acquisition
GER1860H	Introduction to Critical Theory
GER1880H	Gottfried Keller and the Politics of Poetic Realism in a Minor Key
GER2000H,Y	Reading Course in Approved Field
GER2050Y	Research Paper in Yiddish Studies
GER2051H	Topics in Yiddish or German-Jewish Studies
GER6000H	Reading German for Graduate Students
JGC1660H	Modernism and the Other
JGC1740H	Humans and Things
JGC1855H	Critical Theory in Context: The French-German Connection
JGF1733H	Autobiographical Documentary: History, Alterity, and Performativity

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:

- Contemporary East and Southeast Asian Studies
  - Global Affairs, MGA
  - Public Policy, MPP
- 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
Email: mga@utoronto.ca
Telephone: (416) 946-8917
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Canada

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Master of Public Policy Program
University of Toronto
Canadiana Gallery

Third Floor, 14 Queen's Park Crescent West
Toronto, Ontario M5S 3K9
Canada

Global Affairs and Public Policy: Graduate Faculty

Full Members

Baker, Michael - BComm, MA, PhD
Bertoldi, Nancy - BA, MA, PhD
Breznitz, Dan - BA, PhD
Breznitz, Shiri - BA, MA, PhD
Cody, Francis - PhD
Craft, Jonathan - MA, PhD
Deibert, Ronald - BA, MA, PhD
Frazer, Garth - BE, BM, MPH, MA, PhD
Hall, Jonathan - BA, PhD
Hansen, Randall - BA, MPH, PhD, CRC
Heath, Joseph - BA, MA, PhD, FRSC
Heblich, Stephan - PhD
Kasekamp, Andres - PhD
Katz, Larissa - BA, LLB, LLM, SJD, CRC
Kroft, Kory - BA, MA, PhD
Lam, Tong - BSc, MA, PhD
Levi, Ron - BCL, LLB, LLM, SJD
Lindsay, Jon - BS, MS, PhD
Lipscy, Phillip - PhD
Loewen, Peter - PhD
Manger, Mark - DrRerPol
McGahan, Anita - BA, MA, MBA, PhD
Misak, Cheryl - BA, MA, DPhil, FRSC ***(Interim Director until Dec. 31, 2021)***
Ong, Lynette - BA, AM, PhD
Ornston, Darius - BA, MA, PhD
Pauly, Louis - BA, MA, MSc, MSc, PhD, CRC, FRSC
Peng, Ito - BSW, BSc, MA, PhD
Prichard, Wilson R.S. - BA, MPH, DPhil
Robinson, John - BA, BA, MES, MES, PhD, PhD
Shachar, Ayelet - LLB, BA, LLM, SJD
Stein, Janice - BA, MA, PhD, OC, FRSC
White, Graham - BA, MA, PhD
White, Linda - BA, MA, PhD
Wolfe, David - BA, MA, PhD
Wong, Joseph - BA, MA, PhD, CRC
Wu, Yiching - BA, MA, MA, PhD
Zuberi, Daniyal - BA, MSc, PhD

Associate Members

Austin, Robert - BA, MA, PhD
Hejazi, Walid - BA, MA, PhD
Indart, Gustavo - BA, MA, PhD
Jayaraman, Raji - BA, MA, PhD
Kijima, Rie - BA, MA, PhD
Kramarz, Teresa - MSc, PhD
Salardi, Paola - DPhil
Triadafilopoulos, Triadafilos - BA, MA, PhD

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

Master of Public Policy Program
School of Public Affairs, Sciences Po
Email: sophie.riviereduFour@sciencespo.fr

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).
  - 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).
  - 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)

GLA1001H	Macroeconomics: Markets, Institutions, and Growth
GLA1003H	Global Security
GLA1006H	International Legal Challenges
GLA1010H	Microeconomics for Global Affairs
GLA1011H	Global Innovation Policy
GLA1012H	Statistics for Global Affairs
GLA1014H	Global Development

Summer Course (Required)

GLA1007H	Global Internship

Year 2

Core Courses (Required)

GLA2000H	Capstone Seminar (Required for all MGA students and dual degree programs.)
GLA2111H	Research Methods for Global Affairs (Required for all MGA students and all dual degree students.)
GLA2800H	Grand Oral (Required for students in the MGA/MPP dual degree program.)
GLA2887H	Final Research and Analysis (Credit/No Credit. Required for all dual degree students.)
GLA2889Y	Dual Degree Master's Thesis (Credit/No Credit. Required for students in the

	MGA/MIA dual degree program. Prerequisite: GLA2887H.)
GLA2890Y	Policy Paper (Required for students in the MGA/MPA dual degree program. Prerequisite: GLA2887H.)

Elective Courses (Subject to Change)

GLA1013H	Logic of Global Inquiry
GLA2001H	Global Capital Markets and Global Strategies
GLA2002H	Issues in Development Policy and Practice
GLA2003H	Governing With or Without the State
GLA2005H	Negotiating Internationally
GLA2006H	The Global Political Economy of Finance and Investment
GLA2007H	Global Affairs Externship (Credit/No Credit)
GLA2010H	Geopolitics of Cyberspace
GLA2012H	The Global Political Economy of Trade
GLA2013H	Topics in Global Violence
GLA2014H	Innovation and Economic Development
GLA2015H	The Political Economy of the Welfare State
GLA2018H	Innovation and the City
GLA2019H	The Political Economy of Development
GLA2021H	Innovation, Institutions, Governments, and Growth
GLA2022H	Global Institutions and Diplomacy
GLA2023H	Justice Reforms in Global Context
GLA2024H	Intelligence and Cybersecurity in Global Politics
GLA2025H	Global Affairs Lab
GLA2027H	Ethics and Global Affairs
GLA2028H	Global Civil Society
GLA2029H	Sustainability in the World: A Living Lab Course
GLA2030H	Grand Strategy and Global Threats
GLA2034H	Decision Making and Strategic Thinking
GLA2036H	Bilateral Diplomacy: Canada-Japan and US-Japan Relations
GLA2037H	Financial Management for Global Organizations
GLA2041H	Topics in the Digital World I
GLA2042H	Topics in the Digital World II
GLA2043H	Topics in the Digital World III
GLA2044H	Topics in Global Policy and Asia I
GLA2045H	Topics in Global Policy and Asia II
GLA2046H	Topics in Global Policy and Asia III
GLA2050H	Selected Topics in International Studies
GLA2052H	The Digital Platform Economy
GLA2056H	The Populist Radical Right
GLA2060H	Topics in Development I
GLA2061H	Topics in Development II
GLA2062H	Topics in Development III
GLA2063H	Topics in Security I
GLA2064H	Topics in Security II
GLA2065H	Topics in Security III
GLA2066H	Topics in Justice I
GLA2067H	Topics in Justice II
GLA2068H	Topics in Justice III
GLA2069H	Topics in Markets I
GLA2070H	Topics in Markets II
GLA2071H	Topics in Markets III
GLA2080H	Topics in Innovation I
GLA2081H	Topics in Innovation II
GLA2082H	Topics in Innovation III
GLA2090H	Topics in Global Affairs I
GLA2091H	Topics in Global Affairs II
GLA2092H	Topics in Global Affairs III
GLA2093H	Topics in Global Affairs IV
GLA2095H	MGA Reading Course
GLA2096H	Topics in Global Affairs V
GLA2097H	Topics in Global Affairs VI
GLA2098H	Topics in Global Affairs VII
GLA2555H	Intensive Course in Innovation Policy I
GLA2556H	Intensive Course in Innovation Policy II
GLA2888H	MGA Research Paper
JCR1000Y	An Interdisciplinary Approach to Addressing Global Challenges
JMG2020H	Big Data
JSE1708H	Sustainability and the Western Mind

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:

LAW7030H, PPG2001H, PPG2012H, PPG2013H, PPG2014H, PPG2015H, PPG2018H, PPG2021H, or other approved elective courses in the area.

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

PPG1000H	Governance, Institutions, and Public Policy
PPG1002H	Microeconomics for Policy Analysis (Students who do not pass PPG1002H must retake the Math-Stats diagnostic with a grade of at least 60%)
PPG1003H	Macroeconomics for Policy Analysis
PPG1004H	Quantitative Methods for Policy Analysis (Students who do not pass PPG1004H must retake the Math-Stats diagnostic with a grade of at least 60%)
PPG1005H	The Social Context of Policy-Making
PPG1007H	Strategic Policy Implementation
PPG1008H	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%)

Choose one of:

GLA2029H	Sustainability in the World: A Living Lab Course
GLA2034H	Decision Making and Strategic Thinking

MPP2

PPG2000H	Politics and the Policy Process
PPG2002H	Topics in Applied Economics for Public Policy (Prerequisite: PPG1002H and successful completion of at least 3.5 FCEs in MPP1 courses)
PPG2003H	Capstone Course: Integrating Issues in Public Policy (Prerequisite: successful completion of at least 5.5 FCEs in MPP courses)

Choose one of:

PPG2011H	Ethics and the Public Interest (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)
PPG2022H	Moral Foundations of Public Policy (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)

Elective Courses

Offered by the Munk School of Global Affairs and Public Policy:

PPG2001H	Legal Analysis of Public Policy
PPG2008H	Comparative Public Policy and Transnational Forces
PPG2010H	Panel Data Methods for Public Policy Analysis
PPG2012H	Topics in Public Policy
PPG2013H	Topics in Public Policy I
PPG2014H	Topics in Public Policy II
PPG2015H	Topics in Public Policy III
PPG2017H	Topics in Public Policy: Urban Policy
PPG2018H	The Role of Government
PPG2021H	Priority Topics in Public Administration

Cross-Listed with the Faculty of Law:

LAW7030H	Issues in Aboriginal Law and Policy

Internship

PPG2006Y	MPP Internship (Prerequisite: successful completion of at least 3.5 FCEs in MPP1 courses)

Health Policy, Management and Evaluation

HPME: Introduction

Faculty Affiliation

Public Health

Degree Programs

Health Policy, Management and Evaluation

MSc

- Concentrations:
  - Clinical Epidemiology and Health Care Research;
  - 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;
  - Quality Improvement and Patient Safety;
  - System Leadership and Innovation

PhD

- Concentrations:
  - Clinical Epidemiology and Health Care Research;
  - Health Professions Education Research;
  - 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
  - Health Administration, MHSc
  - Health Policy, Management and Evaluation, MSc, PhD
- Bioethics
  - Health Administration, MHSc
  - Health Policy, Management and Evaluation, MSc, PhD
- Global Health (U of T Global Scholar)
  - Health Policy, Management and Evaluation, MSc (thesis only), PhD
- Health Services and Policy Research
  - Health Policy, Management and Evaluation, MSc, PhD
- Public Health Policy
  - Health Administration, MHSc
  - Health Policy, Management and Evaluation, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - Health Policy, Management and Evaluation, MSc, PhD
- Women and Gender Studies
  - Health Administration, MHSc
  - Health Policy, Management and Evaluation, MSc, PhD
- Women's Health
  - 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

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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, MISt, 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
Guttmann, 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
Jeffs, Lianne - MSN, PhD
Juni, Peter - DrMed
Juurlink, David - BSc, MD, PhD
Kapral, Moira - MD
Karkouti, Keyvan - MD
Krahn, Murray - BA, MSc, MD
Krings, 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
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Mylopoulos, Maria - BS, MA, PhD
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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
Stabile, Mark - BA, MA, PhD, PhD
Stukel, Therese - BS, PhD
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Sutradhar, Rinku - BSc, MMath, PhD
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Verderber, Stephen - BSc, AA, MArch, PhD
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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
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Ashbury, Fredrick D - BA, MA, PhD
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Baumann, Andrea - BN, MN, PhD
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Born, Karen - BA, MSc, PhD
Brandao, Leonardo - MD
Brar, Mantaj - BS, MS, MD
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Brown, Hilary Kathryn - BA, MSc, PhD
Campbell, Wenonah - PhD
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Chan, Brian Chun-Fai - BScPhm, MSc, PhD
Chan, Vincy - DPhil
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de Almeida, John - MD
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Essue, Beverley - PhD
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Evans, Jenna - PhD
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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
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Jaakkimainen, Liisa - BSc, MSc, MD
Jacobson, Jenna - PhD
Jassal, Vanita - MD
Jerath, Angela - BSc, MBBS
Johnson, Sindhu - BMedSc, MD, PhD
Kantarevic, Jasmin - PhD
Karanicolas, 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

Levy, Charissa - MHSc
Lim, Morgan - PhD
Liu, Ning - PhD
Llovet, Diego - PhD
Lo, Alexander - BSc, MD
Loblaw, Andrew - MD
Lok, Charmaine - MSc, MD
Look Hong, Nicole - BSc, MSc, MD
Luo, Zhong-Cheng - MMed, BM, PhD
Maguire, Jonathon - BSc, MSc, MSc, MD
Mahant, Sanjay - MD
Mandigo, Margaux - MSc
Martin, Danielle - BSc, DrMed
Martin, Taylor - MHSA
Mashford-Pringle, Angela - BS, MA, DPhil
McDonald, James Ted - PhD
McKellar, Kaileah - PhD
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McNaughton, Nancy - BA, MEd, PhD
Mercuri, Mathew - PhD
Mishra, Sharmistha - BSc, MD
Mnyusiwalla, Latifa - MPH
Moffat, Malcolm - BS, BSc, MHSc
Moore Hepburn, Charlotte - MD
Moore, Lynn - MHSA
Moretti, Myla - PhD
Morita, Plinio Pelegrini - PhD
Mozessohn, Lee - MD
Muller, Matthew - MD
Murphy, Kellie - MD
Narayanan, Unni - MSc, MD
Nelson, Kate - MD
O'Brien, Kelly - BSc(PT), BS, PhD
Papadakos, Janet - BA, MEd, PhD
Paprica, Alison - DSc
Paterson, Michael - MS
Peckham, Stephen - BSc
Penner, Melanie - MD
Perreira, Tyrone - BPHE, MEd, PhD
Perruccio, Anthony - BSc, MHSc, PhD
Persaud, Navindra - BSc, BA, MSc, MD
Pham, Quynh - PhD
Pinkney, Sonia - MHSc
Pinto, Ruxandra - PhD
Puchalski-Ritchie, Lisa - MA, MD
Rac, Valeria - MD, PhD
Ravi, Bheeshma - BS, MD, PhD
Rayner, Jennifer - PhD
Reichman, Nancy Ellen - BA, MBA, PhD
Ringash, Jolie - MSc, MD
Roifman, Idan - DrMed
Roth, Daniel - BSc, MSc, MD
Rowland, Paula - BS, BS
Roza da Costa, Bruno Cezar - PhD
Rudoler, David - BA, MA, PhD
Saposnik, Gustavo - MSc, MD
Saunders, Natasha - MPH, MS, MD
Schneeweiss, Sebastian - MD
Schwartz, Jeremy - MD
Seeman, Neil - BA, MPH, JD
Shaw, James - BHK, MSc(PT), PhD
Sheehan, Kathleen - BS, MSc, DPhil
Sherifali, Diana - PhD
Silver, Michelle - BA, BS, MA, PhD
Smith, Tina - BSc, MHSc
Snider, Carolyn - BSc, BComm, MPH, MD
Soklaridis, Sophie - BSc, MSS, PhD
Spalding, Karen - MSc, PhD
Sridharan, Sanjeev - BTech, MS, PhD
Ssinabulya, Isaac - MMed
Stanbrook, Matthew - MSc, MD
Steele-Gray, Carolyn - BS, MA, PhD
Steiner, Robert - BA, MBA
Steinhart, Hillary - MD
Stephenson, Anne - MD
Stuart, Neil - BA, MSW, PhD
Sunderji, Nadiya - BA, MD
Sussman, Jonathan - MB, DrMed
Tan, Darrell - BSc, MD, PhD
Teare, Gary - MSc, DrMedVet, PhD
Tepper, Joshua - BA, MPH, DrMed
Toulany, Alene - MD
Touma, Zahi - BSc, MD, PhD
Udell, Jacob - BSc, MPH, MD
Vanstone, Meredith - PhD
Verma, Amol A. - MPH, MD
Versloot, Judith - PhD
Wald, Ron - MPH, MDCM
Walker, Neil - BBA, MHSc
Wegier, Pete - MSc, PhD
Widdifield, Jessica - BSc, PhD
Windrim, Rory - MB
Witiw, Christopher - BS, BS, MS, MD
Wolfstadt, Jesse - BS, MS, MD
Wong, Brian - MD
Wong, Karen - BSc, MSc, MD
Wong, Rebecca - MBChB
Yeh, Ann - MD
Zaheer, Juveria - AB, MSc, DrMed
Zappitelli, Michele - MSc, MD
Zarb, Julia - PhD
Zhang, Cynthia - BS, MHSc
Zubairi, Mohammad Samad Yaseen - 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
  - 3.0 FCEs in electives from HAD5726H, HAD5728H, HAD5730H, HAD5737H, HAD5738H, HAD5743H, HAD5744H, HAD5760H, HAD5763H, HAD5771H, HAD5778H, HAD5780H, and HAD6750H.

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.*
- HAD5760H *Advanced Health Economics and Policy Analysis.*

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
    - CHL5704H *International Human Rights Law and Global Health: The Right to Health in Theory and Practice*.

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 Heath 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*

- HAD5779H *Evidence Synthesis for Health Services, Systems, and Policy Research.*

[0] Course that may continue over a program. The course is graded when completed.

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:
  - 2.5 FCEs required: HAD3010H, HAD3020H, HAD3041Y[0], HAD3050H
  - 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:
  - 3.0 required FCEs (HAD3010H, HAD3020H, HAD3030H, HAD3050H, HAD3060H, HAD3070H)
  - 1.0 required FCE in a research project practicum (HAD3040Y)
  - 1.0 FCE 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: 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:
  - 2.0 required FCEs (HAD2001H; HAD2002H or HAD2012H; HAD2003H or HAD2013H; HAD2004H or HAD2007H)
  - 1.0 required practicum FCE (HAD2010H and HAD2020H or HAD2040Y)
  - 2.0 elective FCEs, of which a maximum 1.0 FCE can be a practicum; please consult with the department about electives
  - 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.*
- HAD5760H *Advanced Health Economics and Policy Analysis.*
- 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:
  - 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 course as appropriate, for example:
    - CHL5523H *Indigenous Health and Social Policy*.
    - CHL5702H *History of International Health*.
    - CHL5704H *International Human Rights Law and Global Health: The Right to Health in Theory and Practice*.
- 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:
  - HAD5720H *Evaluation I*.
  - HAD5728H *Performance Measurement in Health Care: Theory and Application*.
  - HAD5730H *Economic Evaluation Methods for Health Service Research*.
  - HAD5740H *Intermediate Level Qualitative Methods for Health Services and Policy Research*.
  - HAD5742H *Mixed Methods for Health Services Research*.
  - HAD5763H *Advanced Methods in Health Services Research*.
  - HAD5779H *Evidence Synthesis for Health Services, Systems, and Policy Research*.
  - 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 fulfil 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:
  - HAD5730H *Economic Evaluation Methods for Health Service Research*
  - HAD5771H *Resource Allocation Ethics*
  - 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 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

HAD5301H⌘	Introduction to Clinical Epidemiology and Health Care Research
HAD5307H⌘	Introduction to Applied Biostatistics
HAD5311H[0]	Comprehensive/Synthesis (one year)
HAD5316H⌘	Biostatistics II: Advanced Techniques in Applied Regression Methods

[0] Course that may continue over a program. The course is graded when completed.

Recommended Courses

HAD5302H⌘	Measurement in Clinical Research
HAD5303H⌘	Controlled Clinical Trials
HAD5304H⌘	Clinical Decision Making and Cost Effectiveness
HAD5305H⌘	Evidence-Based Guidelines
HAD5306H⌘	Introduction to Health Services Research and the Use of Health Administrative Data
HAD5308H⌘	Evidence Synthesis: Systematic Reviews and Meta-Analysis
HAD5309H⌘	Observational Studies: Theory, Design, and Methods
HAD5310H⌘	Pragmatic Issues in Conduct of Controlled Trials
HAD5730H⌘	Economic Evaluation Methods for Health Service Research
HAD5760H⌘	Advanced Health Economics and Policy Analysis

Elective Courses

HAD5312H⌘	Decision Modelling for Clinical Policy and Economic Evaluation
HAD5313H	Advanced Design and Analysis Issues in Clinical Trials
HAD5314H⌘	Applied Bayesian Methods in Clinical Epidemiology and Health Care Research
HAD5315H⌘	Advanced Topics in Measurement
HAD5316H⌘	Biostatistics II: Advanced Techniques in Applied Regression Methods (prerequisite: HAD5307H or CHL5201H)
HAD6360H[0]	Required Research Practicum in Clinical Epidemiology (Credit/No Credit)
HAD6361H[0]	Optional Research Practicum in Clinical Epidemiology (Credit/No Credit)
HAD7002H⌘	Reading Course

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.

[0] Course that may continue over a program. The course is graded when completed.

Concentration: Health Professions Education Research (HPER)

Required Courses

HAD5011H⌘	Canada's Health Care System and Health Policy (Doctoral Stream)
HAD6500H⌘	Essential Skills in HPER
HAD6501H⌘	Introduction to Methods/Methodologies for HPER
HAD6502H⌘ **or** HAD6503H⌘	Survey of Critical and Interpretive Social Science Theory for HPER **or** Survey of Cognitive, Behavioural, and Epidemiological Sciences Theory
HAD6504H⌘ **or** HAD6505H⌘	Intermediate Critical and Interpretive Social Science Methods **or** Intermediate Cognitive, Behavioural, and Epidemiological Sciences Methods
HAD6560H	Health Professions Education Research (HPER) Comprehensive Exam

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

HAD5011H⌘	Canada's Health Care System and Health Policy (Doctoral Stream)

HAD5012H	Patient and Caregiver Engagement in Research
HAD5022H⌘	Politics, Policy, Public Health, and Health Technology
HAD5726H⌘	Evaluation and Research Design in Health Informatics
HAD5727H⌘	Knowledge Transfer and Exchange
HAD5728H⌘	Performance Measurement in Health Care: Theory and Application
HAD5730H⌘	Economic Evaluation Methods for Health Service Research
HAD5737H⌘	Tools for Implementation of Best Evidence
HAD5738H⌘	Advanced Methods in Economic Evaluation
HAD5740H⌘	Intermediate-Level Qualitative Research for Health Services and Policy Research
HAD5742H⌘	Mixed Methods for Health Services Research
HAD5743H⌘	Evaluation II
HAD5744H⌘	Applied Health Econometrics I
HAD5745H⌘	Where Health Economics Hits the Road: Practical Applications of Economics to Real Health Care Problems
HAD5746H⌘	Applied Health Econometrics II
HAD5747H	Cognitive, Social, and Information Science Theory in Health Informatics Research
HAD5748H⌘	Introduction to Survey Design and Psychometrics (prerequisite: HAD5772H or equivalent)
HAD5749H⌘	Knowledge to Action: Disseminating and Implementing Evidence into Practice
HAD5750H⌘	Seminar in Organizational Behaviour
HAD5755Y	Health Economics Graduate Seminar Series (Credit/No Credit)
HAD5760H⌘	Advanced Health Economics and Policy Analysis
HAD5763H⌘	Advanced Methods in Health Services Research
HAD5771H⌘	Resource Allocation Ethics
HAD5772H⌘	Intermediate Statistics for Health Services Researchers
HAD5773H⌘	Introduction to Theories of Organizational Behaviour and Applications to the Health Care Sector
HAD5774H⌘	Comparative Health Care Systems
HAD5777H⌘	Leading and Managing Change: Building Adaptive Capacity
HAD5778H⌘	Comparative Health Systems and Policy
HAD5779H⌘	Evidence Synthesis for Health Services, Systems and Policy Research
HAD5780H⌘	Program Planning and Evaluation for Health Services and Policy Research
HAD5781H⌘	Case Study Research for Health Services, Systems and Policy
HAD6506H	Assessment in Health Professions Education
HAD6750H⌘	Advanced Health Economics and Policy Analysis II
HAD6760H⌘	Introduction to Health Services Research Theory and Methods
HAD6761H	Health Services Outcomes and Evaluation Comprehensive Course
HAD6762H	Health Services Organization and Management Comprehensive Course
HAD6763H	Health Policy Comprehensive Course
HAD6764H	Health Informatics Research Comprehensive Course
HAD6765H	Health Technology Assessment Comprehensive Course (Credit/No Credit)
HAD6770H⌘	Applying Health Services Research Methods (prerequisite: HAD6760H)
HAD7001H⌘	Reading Course
JNH5001H	Health Care Settings, Site, and Human Well Being
JNH5003H	Home and Community Care Knowledge Translation

Concentration: Quality Improvement and Patient Safety

Required Courses

HAD3010H⌘	Fundamentals of Improvement Science
HAD3020H⌘	Quality Improvement Methods
HAD3025H⌘	Teaching QI and Patient Safety (prerequisites: HAD3010H, HAD3020H, HAD3040Y+)
HAD3030H⌘	Concepts and Strategies in Patient Safety
HAD3040Y+	Project Practicum
HAD3041Y0	Design and Methods for Thesis Research
HAD3050H⌘	Leading and Managing Change
HAD3060H⌘	Quality Improvement in Health Systems
HAD3070H⌘	Health Law and Risk Management for Quality Improvement and Patient Safety

Practicum Course

HAD3080H	External Practicum

Elective Courses

HAD3090H⌘	The Application of Lean in Healthcare
HAD4000H	Reading Course — QIPS

+ 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.

Concentration: System Leadership and Innovation

Required Courses

HAD2001H⌘	Strategic Vision and Planning for Health System Change
HAD2002H⌘	Research Methods for Evaluating Health System Innovation
HAD2003H⌘	Leading and Responding to Health Policy and System Change
HAD2004H⌘	Leadership, Motivation, and Partnering

Practicum Courses

HAD2010H	Health Systems Leadership Practicum (Individual) (Credit/No Credit)
HAD2011H0	Individual Practicum — Quality Improvement
HAD2020H	Health Systems Consulting Practicum (Team) (Credit/No Credit)

Elective Courses

HAD2005H⌘	Quality Improvement Skills for Healthcare Leaders
HAD2006H	Accelerating Innovations in Medical Education
HAD2007H⌘	Leading Health Systems innovation and Transformation (prerequisite: HAD2004H)
HAD2008H⌘	Human Factors, Strategy, and Innovation Leadership (prerequisite: HAD2004H)
HAD2012H⌘	Learning Health Systems: Research Tools, Approaches, and Lessons
HAD2013H⌘	Fundamentals of Health Economics and Policy
HAD2030H	Health Systems Innovation Capstone (Credit/No Credit) (prerequisites: HAD2001H, HAD2002H, HAD2003H, HAD2004H, HAD2005H, HAD2010H, HAD2020H)
HAD2040Y0	Systems Innovation and Leadership Project Course (Credit/No Credit) (prerequisites: HAD2001H, HAD2003H, and HAD2004H)

Cross-Listed Courses

These courses are limited to certain program students in Health Policy, Management and Evaluation. Please check the IHPME website.

CHL5300H⌘	Public Health Policy
HSR1001H	Introduction to Qualitative Methods for Health Services and Policy Research
HSR1002H	Health Services Research Seminar (Credit/No Credit)
JCV3060H	Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction
JCV3061H	Advanced Topics in Cardiovascular Sciences — Hormones
JCV3062H	Advanced Topics in Cardiovascular Sciences — Heart Function
JCV3063H	Advanced Topics in Cardiovascular Sciences — Vascular

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

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:
  - 9.0 FCEs are required subjects, which include a minimum of 1.0 FCE in a field placement.
  - The remaining 1.0 FCE are 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

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.

HAD5010H⌘	Canada's Health System and Health Policy: Part I
HAD5020H⌘	Canada's Health System and Health Policy: Part II
HAD5711H⌘	Theory and Practice of Strategic Planning and Management in Health Services Organization
HAD5713H⌘	Introduction to Health Information Systems
HAD5721H⌘	Strategic Management of Quality and Organizational Behaviour in Health Services Organizations
HAD5723H⌘	Health Services Accounting
HAD5724H⌘	Quantitative Methods for Health Services Management and Policy
HAD5725H⌘	Health Economics
HAD5731H⌘	Translating Leadership Into Practice
HAD5733H⌘	Health Services Finance
HAD5741H⌘	Health Law and Ethics
HAD5761H⌘	Introduction to eHealth: Informatics, Innovations, and Information Systems
HAD5767H⌘	Health Services Marketing
HAD5769H⌘	Human Resources Management in the Health Field
HAD5770H⌘	Program Planning and Evaluation
HAD5800H	The Fundamentals of Health Services Leadership (Credit/No Credit) (prerequisites: all courses in Blocks 1 to 3, plus HAD5725H, HAD5741H, and HAD5769H)
HAD6010Y+	Health Care Leadership Practicum (Credit/No Credit)
HAD6011H+	Health Care Leadership Practicum Extension (Credit/No Credit)

+ *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.

HAD5736H⌘	Operations Research Tools for Quantitative Health Care Decision Making
HAD5765H⌘	Case Studies in Health Policy
HAD5775H⌘	Competition, Cooperation, and Strategy in Health Care

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.

Required Courses for the Regular MHI Option

HAD5010H⌘	Canada's Health System and Health Policy: Part I
MHI1001H⌘	Information and Communication Technology in Health Informatics
MHI1002H⌘	Complexity of Clinical Care
MHI2001H⌘	Fundamentals of Health Informatics
MHI2002H⌘	Emergent Topics in Health Informatics
MHI2003H⌘	Emerging Applications in Consumer, Public, and Global Health Informatics
MHI2004H⌘	Human Factors and Systems Design in Health Care
MHI2006H⌘	Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)
MHI2007H⌘	Quantitative Skills in Health Informatics
MHI2008H⌘	Project Management for Health Informatics
MHI2009H⌘	Evaluation Methods for Health Informatics
MHI2011H⌘	Performance Measurements in Health Care: Theory and Application
MHI2017H⌘	Systems Analysis and Process Innovation in Healthcare
MHI2018H⌘	Knowledge Management and Systems
MHI2019H⌘	Health Information Systems, Services, and Design

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.

MHI2010H	Extended Health Informatics Practicum
MHI2012H⌘	Introduction to Big Data for Health: Foundations and Methodologies
MHI2013H⌘	Data Visualization in Health Care
MHI3000H⌘	Independent Reading for Health Informatics

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:
  - active employment in a health informatics role or capacity; and
  - 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:
  - Required coursework (7.5 FCEs)
  - Elective coursework (1.0 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, 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

HAD5010H⌘	Canada's Health System and Health Policy: Part 1
MHI1001H⌘	Information and Communication Technology in Health Informatics
MHI1002H⌘	Complexity of Clinical Care
MHI2001H⌘	Health Informatics I
MHI2002H⌘	Health Informatics II
MHI2003H⌘	Emerging Applications in Consumer, Public and Global Health Informatics
MHI2004H⌘	Human Factors and Systems Design in Health Care
MHI2006H⌘	Advanced Topics in Health Informatics (Strategic Frameworks for Solution Architecture)
MHI2007H⌘	Quantitative Skills in Health Informatics
MHI2008H⌘ or HAD5731H⌘ or HAD5733H⌘	Project Management for Health Informatics or Translating Leadership into Practice or Health Services Finance
MHI2009H⌘	Evaluation Methods for Health Informatics
MHI2011H⌘	Performance Measurements in Health Care: Theory and Application
MHI2017H⌘	Systems Analysis and Process Innovation in Healthcare
MHI2018H⌘	Knowledge Management and Systems
MHI2019H⌘	Health Information Systems, Services, and Design
MHI3000H⌘	Independent Reading for Health Informatics

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.

MHI2012H⌘	Introduction to Big Data for Health: Foundations and Methodologies
MHI2013H⌘	Data Visualization in Health Care
MHI2016H	Health Informatics Project Extension
MHI3000H⌘	Independent Reading for Health Informatics

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:
  - African History;
  - American History;
  - Atlantic World History;
  - British and Irish History;
  - Canadian History;
  - East Asian History;
  - European History;
  - Latin American and Caribbean History;
  - Medieval History;
  - Mediterranean and Middle Eastern History;
  - Russian History;
  - South Asian History;
  - Southeast Asian History

- Fields by Theme:
  - Contemporary International History (MA only);
  - Cultural and Intellectual History;
  - Food History;
  - History of Conflict, Violence, and Genocide;
  - History of Economy, Technology, and Society;
  - History of Empire, Colonialism, and Indigeneity;
  - History of Gender, Sex, and Sexualities;
  - History of Medicine;
  - History of Migration/Diaspora;
  - History of Religion and Society;
  - History of State, Politics, and Law;
  - International Relations;
  - Social History

Collaborative Specializations

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

- Book History and Print Culture
  - History, MA, PhD
- Contemporary East and Southeast Asian Studies
  - History, MA
- Diaspora and Transnational Studies
  - History, MA, PhD
- Ethnic, Immigration and Pluralism Studies
  - History, MA, PhD
- Food Studies
  - History, MA, PhD
- Jewish Studies
  - History, MA, PhD
- Sexual Diversity Studies
  - History, MA, PhD
- South Asian Studies
  - History, MA, PhD
- Women and Gender Studies
  - History, MA, PhD

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

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Toronto, Ontario M5S 3G3
Canada

History: Graduate Faculty

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

Bohaker, Heidi - BA, BEd, MA, DPhil
Bothwell, Robert - BA, AM, PhD
Brown, Elspeth - MA, PhD
Chen, Li - BA, MA, AM, JD, PhD
Chin, Carol - BA, MA, PhD
Cochelin, Isabelle - DipdESup, BA, MA, PhD
Cohen, Paul - AM, PhD
Coleman, Kevin - PhD
Emon, Anver - BA, LLB, LLM, MA, PhD, SJD, CRC
Everett, Nicholas - BA, MA, PhD
Fujitani, Takashi - BA, MA, PhD
Gervers, Michael - BA, MA, PhD
Goering, Joseph - BA, MA, MSL, PhD
Greer, Allan - BA, MA, PhD
Grewal, Anup - BA, MA, PhD
Hall, Bert - BA, PhD
Halpern, Rick - PhD
Hanssen, Jens - BPhil, DPhil
Hawkins, Sean - MA, PhD
Hill, Susan - PhD
Hood, Adrienne - PhD
Iacovetta, Franca - AB, AM, PhD
Ingham, John - BA, MA, PhD
Jenkins, Jennifer - BA, MA, PhD
Jennings, Eric - BA, MA, PhD
Kasekamp, Andres - PhD
Kasturi, Malavika - DPhil
Kawashima, Ken - BA, MA, PhD
Kazal, Russell - AB, MA, PhD
Keil, Charlie - BA, MA, PhD
Kidd, Bruce - BA, AM, MA, PhD, OC
Kivimae, Juri - AM, PhD
Lahusen, Thomas - MA, PhD
Lam, Tong - BSc, MA, PhD
Loeb, Lori - BA, PhD
MacArthur, Julie - BA, MPH, PhD
MacDowell, Laurel - BA, MSc, PhD
MacMillan, Margaret - BPhil, DPhil
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Mar, Lisa - PhD
McGowan, Mark - BA, MA, PhD
Meyerson, Mark - BA, PhD ***(Associate Chair, Graduate)***
Mills, Sean - MA, PhD
Morgan, Cecilia Louise - BA, BA, MA, PhD
Mori, Jennifer - PhD
Murphy, Michelle - BA, PhD
Musisi, Nakanyike - PhD
Newton, Melanie - BA, PhD
Noel, Janet - BA, MA, PhD
Penfold, Steve - MA, PhD
Phillips, James - LLB, MA, PhD
Pilcher, Jeffrey - BA, MA, PhD
Pruessen, Ronald - BA, MA, PhD
Radforth, Ian - BA, MA, PhD
Raman, Bhavani - BA, MA, PhD
Retallack, James - BA, DPhil
Rockel, Stephen - AM, DPhil
Rothman, Natalie - MA, DPhil
Sayle, Timothy - AM, MPA, PhD
Schmid, André - BA, MA, PhD
Sharma, Jayeeta - BA, MPH, MA, PhD
Shorter, Edward - BA, MA, PhD
Silano, Giulio - BA, LLB, BEd, MA, PhD
Smith, Alison - AM, PhD ***(Chair and Graduate Chair)***
Smyth, Denis - BA, PhD
Tavakoli-Targhi, Mohamad - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Tran, Nhung - MA, PhD
Van Isschot, Luis - MA, PhD
Viola, Lynne - BA, MA, PhD
Virani, Shafique - PhD
Wang, Yvon - BA, PhD
Wark, Wesley - BA, BA, MA, PhD
Wilson, David - BA, MA, PhD
Wittmann, Rebecca - AB, MA, PhD
Wrobel, Piotr Jan - MA, 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:
  - 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 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:
  - paper-based TOEFL exam: 600 with 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 with 22/30 on the writing and speaking sections.

Program Requirements

- Students may complete the MA by:
  - coursework and research paper or
  - 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:
  - 0.5 FCE: HIS1997H
  - 1.0 FCE: HIS2000Y[0] MA essay
  - 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:
  - 0.5 FCE: HIS1997H
  - 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

[0] 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:
  - 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 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:
  - paper-based TOEFL exam: 600 with 5 on the Test of Written English (TWE)
  - Internet-based TOEFL exam: 100/120 with 22/30 on the writing and speaking sections.

Program Requirements

- **Coursework.** Students must successfully complete a total of **2.5 full-course equivalents (FCEs)** as follows:
  - 0.5 FCE: HIS1997H
  - 0.5 required FCE: HIS1900H or HIS1901H
  - the remaining 1.5 FCE can be taken within or outside the History department.
- HIS2000Y[0], a research project defined in consultation with a supervisor and approved by the CIH Coordinator.
- 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.

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

[0] Course that may continue over a program. The course is graded when completed.

History: History PhD

Doctor of Philosophy

Program Description

The Department of History offers a broadly diversified program of graduate studies leading to the Doctor of Philosophy 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.

Applicants may enter the PhD program via one of two routes: 1) following completion of an appropriate MA 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 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.
- Normally, applicants may enter the PhD program with an **MA degree** in history or its equivalent 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**. With **MA degree in history**: students must successfully complete a total of **2.0 full-course equivalents (FCEs)** with a B+ average throughout the coursework.
- **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. 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.

HIS1001H	Topics in History
HIS1003H	Theory and History
HIS1004H	History and Biopolitics
HIS1007H	Theories, Histories, Imaginaries: Themes in Technoscience

HIS1008H	The Practice of Public History and Archival Research
HIS1009H	Empire and Governmentality: Economy, Culture, and Liberal Governance
HIS1010H	New Historiographies of Capitalism: Globality and Making Space, Time, Subjects
HIS1011H	Queer and Trans Oral History
HIS1013H	Intellectuals and Decolonization
HIS1014H	Neoliberalism in North America
HIS1015H	Oral History Theory and Practice
HIS1016H	Historical Readings in Gender and Sexuality
HIS1019H	Science, Nature, and Empire
HIS1020H	Cultural Theory/Cultural History
HIS1031H	Images as History: Photography, Historical Method, and Conceptualizing Visuality
HIS1032H	Modernity and Its Visual Cultures
HIS1040H	Maps in History: Power and Identity, Conflict and Imagination
HIS1104H	Natives and Empires: Colonial History of the Americas, 1492–1800
HIS1105H	Colonial North America, 1600–1783
HIS1106H	Topics in Canadian Social History
HIS1107H	Religion, Culture, and Society in Canada (joint graduate/undergraduate)
HIS1113H	Politics and Society in North American History
HIS1117H	Canada: Colonialism/Postcolonialism
HIS1118H	Canada By Treaty: Alliances, Title Transfers, and Land Claims
HIS1128H	Canada and Transnational History
HIS1142Y	Canadian Foreign Relations, 1940–2003 (joint graduate/undergraduate)
HIS1168H	History of the Sex Trade in Canadian and Comparative Contexts
HIS1180H	Race in the USA and Canada
HIS1200H	Readings in European Intellectual History
HIS1203H	Jus Commune
HIS1204H	Topics in Medieval Church History
HIS1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS1215H	Social Change in Medieval England, 1154–1279
HIS1221H	Topics in Early Modern European Social History
HIS1228H	Revolutions in History: The Annales School in Context
HIS1230H	The Sexes in the Western World, 1450–1650
HIS1232H	European Colonialism, 1870–1970: A Comparative History
HIS1233H	Colonial Urbanism in the Mediterranean World, 1800–1950
HIS1234H	Readings in Early Modern French History
HIS1235H	Histories in the Mediterranean: From Braudel to Post-Colonialism
HIS1237H	France: 1870–1968
HIS1268H	The Holocaust and World War II
HIS1269H	The Social History of Medicine in the Nineteenth and Twentieth Centuries (joint graduate/undergraduate)
HIS1270H	History of Psychiatry and Psychiatric Illness (joint graduate/undergraduate)
HIS1272H	Topics in Twentieth-Century European History
HIS1275H	Imperial Germany, 1871–1918
HIS1278H	Topics in 20th C German History
HIS1279H	World War II in East Central Europe (joint graduate/undergraduate)
HIS1281H	History of Real Socialism
HIS1283H	Crusades, Conversion, and Colonization in the Medieval Baltic (joint graduate/undergraduate)
HIS1286H	Categories of Imperial Russian Social History
HIS1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS1288H	Russia's Empire
HIS1289H	The Cold War Through Its Archives
HIS1289Y	Twentieth Century Ukraine
HIS1290H	Topics in Imperial Russian History
HIS1293Y	Kievan Rus' (joint graduate/undergraduate)
HIS1296H	Stalinism and After: Beyond Cold War History
HIS1301H	History of Food and Drink
HIS1416H	Early Modern English Popular Culture, 1500–1800
HIS1435H	Studies in Victorian Society
HIS1440H	Irish Nationalism in Canada, 1858–1870 (joint graduate/undergraduate)
HIS1511H	History and Present-Day Policy Analysis
HIS1531H	American Political History Since 1877
HIS1532H	American Foreign Policy in the Cold War

HIS1533H	Gender and International Relations (joint graduate/undergraduate)
HIS1538H	Reading in U.S. History
HIS1552H	Historical Perspectives on Gender and Migration, 1500–2010
HIS1620H	Asian Diasporas
HIS1662H	Rethinking Modernity Through Japan
HIS1664H	Religion and Society in Southeast Asia
HIS1667H	Transnational Gender Histories
HIS1673H	Critical Historiography of Late Imperial and Modern China
HIS1675H	Imperial Circulation and Diasporic Flows in the British Empire
HIS1677H	Empire and Nation in Modern East Asia
HIS1678H	War and Memory in Twentieth-Century East Asia
HIS1702H	Colonial Violence: Comparative Histories
HIS1704H	Colloquium in Latin American and Caribbean History
HIS1705H	Trends in Women and Gender History in the Global South
HIS1707H	Topics in African History
HIS1708H	Labour in the Age of Imperialism
HIS1712H	Topics on the History of Ethiopia
HIS1725H	Topics in Latin American History: Race, Gender, and Citizenship
HIS1784H	The Islamic Revolution
HIS1785H	International Relations in the Middle East
HIS1800H	Global Histories of the Archives
HIS1802H	Slavery in North America (joint undergraduate/graduate)
HIS1805H	Human Rights and Empire (exclusion: HIS1860H)
HIS1806H	Histories of the Carceral State
HIS1810H	Indigenous Economies and Imperialism
HIS1820H	Law, Space, and History
HIS1825H	Changing Skylines: (Re)mapping Urban History in the Global Age
HIS1830H	Critical Approaches to Historical Anthropology
HIS1840H	Empires in World War II
HIS1850H	Queer Archives and LGBTQ History
HIS1860H	Global Rights: A Critical History
HIS1870H	History on Film/Film on History
HIS1880H	Digital History
HIS1890H	Regimes of Value
HIS1900H	History in International Affairs
HIS1901H	Approaches and Methodologies in Contemporary International History
HIS1997H	The Practice of History (Credit/No Credit)
HIS1998H	Reading Course
HIS1999H	Reading Course
HIS2000Y[0]	Directed Research
JHL1282H	Comparative Totalitarian Culture
JHL1680H	Revolutionary Women's Cultures in East Asia, Early to Mid 20th Century
JHP1289Y	Twentieth-Century Ukraine (joint graduate/undergraduate)
JHP2351Y	The People From Nowhere

[0] Course that may continue over a program. The course is graded when completed.

Courses in Other Departments Taught by History Faculty

COL5027H	Memory, Trauma, and History
MST1110H	Diplomatics and Diplomatic Editing
MST3205H	Violence in Medieval Society
MST3225Y	Jews and Christians in Medieval and Renaissance Europe

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: ihpst.info@utoronto.ca
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Fax: (416) 978-3003

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Old Victoria College
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History and Philosophy of Science and Technology: Graduate Faculty

Full Members

Baigrie, Brian - BA, MA, PhD
Berkovitz, Joseph - BSc, MA, PhD
Birn, Anne-Emanuelle - BA, MA, DSc
Chakravartty, Anjan - BSc, MPH, MA, PhD
Dacome, Lucia - BA, MPH, PhD
Dyck, Erika - BA, BA, MA, PhD
Fehige, Yiftach - 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
Solovey, 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:
  - Paper-based TOEFL: 580 and 5 on the TWE
  - 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:
  - One of the three history fields (History of Mathematics and Physical Sciences; History of Medicine and Life Sciences; History of Technology), **or**
  - The philosophy field (Philosophy of Science).
- Students in a **history field** must:
  - Complete HPS1000H *Introduction to the History and Philosophy of Science and Technology* (0.5 FCE) in the first session
  - Complete 1.0 FCE from the HPS 2000 series
  - Complete 0.5 FCE from the HPS 3000 series
  - Complete elective courses (1.0 FCE)
  - 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:
  - Complete HPS1000H *Introduction to the History and Philosophy of Science and Technology* (0.5 FCE) in the first session
  - Complete 0.5 FCE from the HPS 2000 series
  - Complete 1.0 FCE from the HPS 3000 series
  - Complete elective courses (1.0 FCE)
  - 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.

Program Requirements

- 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 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.
- 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

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

applicant's overall program and of at least an A– in the applicant's final two years of study.
- 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.

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.

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 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 or
  - Internet-based TOEFL: 93/120 and 22/30 on the writing and speaking sections.

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.

History and Philosophy of Science and Technology

HPS1000H	Introduction to the History and Philosophy of Science and Technology (pro-seminar: required for all students in their first session)
HPS1001H	Individual Reading and Research in History and Philosophy of Science and Technology
HPS1002H	Individual Reading and Research in History and Philosophy of Science and Technology
HPS1003H	Individual Reading and Research in History and Philosophy of Science and Technology
HPS1005Y	Individual Reading and Research in History and/or Philosophy of Science and Technology
HPS1100Y[+]	Advanced Research Paper (required for all students)
HPS1500H	Research Paper
HPS2000H	History of Mathematics
HPS2001H	History of Physics
HPS2003H	History of Biology
HPS2004H	History of Medicine
HPS2006H	History of Technology
HPS2008H	History of Psychology
HPS2009H	History and Philosophy of the Social Sciences
HPS2010H	The Sciences of Human Nature
HPS3000H	Philosophy of Science
HPS3001H	The Philosophy of Biology
HPS3002H	The History and Philosophy of Science

HPS3003H	Social Studies of Medicine
HPS3004H	Philosophy of Medicine
HPS3006H	Philosophy of Probability
HPS3007H	Philosophy of Economics
HPS3008H	Philosophy of Science and Religion
HPS3009H	Slavery, Medicine, and Science in Historical Perspective
HPS3010H	Social Epistemology
HPS4001H	The Scientific Revolution: Galileo to Newton
HPS4007H	Body, Medicine, and Society in Early Modern Europe
HPS4011H	Cognitive Technologies: Philosophical Issues and Debates
HPS4017H	The Rise of Eugenics: A Comparative History
HPS4020H	Postcolonialism and the Global Turn in Science and Technology Studies
HPS4021H	Feminist Approaches to Science and Technology Studies
HPS4040H	Computing and Information from Babbage to AI
HPS4106H	Environment and STS
HPS4300H	The Historian's Craft: Sources, Methods, and Approaches
HPS4512H	Thought Experiments
HPS4601H	Topics in Philosophy of Science

+ 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

BKS1001H	Introduction to Book History
BKS1002H	Book History in Practice
BKS2000H	Advanced Seminar in Book History and Print Culture

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
Roifman, 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: IMM1050H^0, IMM1075H^0
    - 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

IMM1050H^0	Easton Seminar Series (I) (Credit/No Credit)
IMM1075H^0	Special Topics in Immunology (I) (Credit/No Credit)
IMM1428H	Molecular Immunology
IMM1429H	Developmental Immunology
IMM1430H	Clinical Immunology
IMM1431H	Immunotherapy
IMM1436H	Techniques in Immunology
IMM1450Y	Major Research Project in Immunology (I)
IMM1550Y	Major Research Project in Immunology (II)
IMM1650Y	Major Research Project in Immunology (III)
IMM1651H	Applied Research in Immunology (Credit/No Credit)

[0] Course that may continue over a program. Credit is given when the course is 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.

BTC1850H	Creating Life Science Products
BTC1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
CSB1018H	Advanced Microscopy and Imaging
CSB1472H	Computational Genomics and Bioinformatics
IMM1435H	Practical 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

[0] Course that may continue over a program. The course is graded when completed.

Program Length

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

Time Limit

3 years full-time

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.

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[0], IMM1075H[0], IMM1436H, IMM1651H
  - 1.0 FCE selected from the elective course list below.

Required Courses

IMM1050H[0]	Easton Seminar Series (I) (Credit/No Credit)
IMM1075H[0]	Special Topics in Immunology (I) (Credit/No Credit)
IMM1436H	Techniques in Immunology
IMM1550Y	Major Research Project in Immunology (II)
IMM1650Y	Major Research Project in Immunology (III)
IMM1651H	Applied Research in Immunology (Credit/No Credit)

[0] Course that may continue over a program. Credit is given when course is 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.

BTC1850H	Creating Life Science Products
BTC1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
CSB1018H	Advanced Microscopy and Imaging
CSB1472H	Computational Genomics and Bioinformatics
IMM1435H	Practical 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 sessions full-time (typical registration sequence: S/F/W/S)

Time Limit

3 years full-time

Immunology: Immunology MSc Field: Fundamental 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.

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^{0} *Student Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1050H^{0} *Easton Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1075H^{0} *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

IMM1000Y	Recent Advances in Immunology
IMM1025H^{0}	Student Seminar Series (I) (Credit/No Credit)
IMM1050H^{0}	Easton Seminar Series (I) (Credit/No Credit)
IMM1075H^{0}	Special Topics in Immunology (I) (Credit/No Credit)
IMM1200H^{+}	Scientific Skills for Immunologists

^{0} Course that may continue over a program. Credit is given when course is completed.

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

Elective Courses

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
IMM2200H[+]	Graduate Professional Development (GPD) 2.0
JBZ1472H	Computational Genomics and Bioinformatics
JDB1025H	Developmental Biology
JFK1121H	Selected Topics in Drug Development II
JTB2010H	Proteomics and Functional Genomics
JTB2020H	Applied Bioinformatics
MSC1090H	Introduction to Computational BioStatistics with R
MSC7000Y	Regenerative Medicine
PSL1014H	Advanced Topics: The Gastrointestinal Epithelium

[+] *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.*

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.

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)
  - IMM2025H[0] *Student Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2050H[0] *Easton Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2075H[0] *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

IMM1000Y	Recent Advances in Immunology
IMM1200H[+]	Scientific Skills for Immunologists
IMM2000H	PhD Proposal in Immunology
IMM2025H[0]	Student Seminar Series (II) (Credit/No Credit)

IMM2050H[0]	Easton Seminar Series (II) (Credit/No Credit)
IMM2075H[0]	Special Topics in Immunology (II) (Credit/No Credit)
DEX5555Y	Departmental Examination (Credit/No Credit; prerequisite: IMM1000Y)

[+] 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.

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
JFK1121H	Selected Topics in Drug Development II
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 (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, IMM1025H[0], IMM1050H[0], and IMM1075H[0].

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)
  - IMM1025H[0] *Student Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1050H[0] *Easton Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1075H[0] *Special Topics in Immunology I* (Credit/No Credit; 0.5 FCE)
  - IMM2000H *PhD Proposal in Immunology* (0.5 FCE)
  - IMM2025H[0] *Student Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2050H[0] *Easton Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2075H[0] *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

IMM1000Y	Recent Advances in Immunology
IMM1200H[+]	Scientific Skills for Immunologists
IMM1025H[0]	Student Seminar Series (I) (Credit/No Credit)
IMM1050H[0]	Easton Seminar Series (I) (Credit/No Credit)
IMM1075H[0]	Special Topics in Immunology (I) (Credit/No Credit)

IMM2000H	PhD Proposal in Immunology
IMM2025H[0]	Student Seminar Series (II) (Credit/No Credit)
IMM2050H[0]	Easton Seminar Series (II) (Credit/No Credit)
IMM2075H[0]	Special Topics in Immunology (II) (Credit/No Credit)
DEX5555Y	Departmental Examination (Credit/No Credit; prerequisite: IMM1000Y)

[+] *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.

BTC1850H	Creating Life Science Products
BTC1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
CSB1018H	Advanced Microscopy and Imaging
CSB1472H	Computational Genomics and Bioinformatics
IMM2400H	Translational Immunology
JBZ1472H	Computational Genomics and Bioinformatics
JDB1025H	Developmental Biology
JFK1121H	Selected Topics in Drug Development II
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

5 years

Time Limit

7 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)
  - IMM1025H[0] *Student Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1050H[0] *Easton Seminar Series (I)* (Credit/No Credit; 0.5 FCE)
  - IMM1075H[0] *Special Topics in Immunology I* (Credit/No Credit; 0.5 FCE)
  - IMM2025H[0] *Student Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2000H *PhD Proposal in Immunology* (0.5 FCE)
  - IMM2050H[0] *Easton Seminar Series (II)* (Credit/No Credit; 0.5 FCE)
  - IMM2075H[0] *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

IMM1000Y	Recent Advances in Immunology
IMM1200H[+]	Scientific Skills for Immunologists
IMM1025H[0]	Student Seminar Series (I) (Credit/No Credit)
IMM1050H[0]	Easton Seminar Series (I) (Credit/No Credit)
IMM1075H[0]	Special Topics in Immunology (I) (Credit/No Credit)
IMM2000H	PhD Proposal in Immunology
IMM2025H[0]	Student Seminar Series (II) (Credit/No Credit)
IMM2050H[0]	Easton Seminar Series (II) (Credit/No Credit)
IMM2075H[0]	Special Topics in Immunology (II) (Credit/No Credit)
DEX5555Y	Departmental Examination (Credit/No Credit; prerequisite: IMM1000Y)

[+] *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.

BTC1850H	Creating Life Science Products
BTC1860H	Generation of Advanced Medicine: Biologics in Therapy (GAMBiT)
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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

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, MEc, 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, Kerry - 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.

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 fulfil 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.
  - 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

IRE1002H	Applied Statistics in Industrial Relations
IRE1010H	Economic Foundations of Industrial Relations and Human Resources
IRE1126H	Economics of Labour and Human Resources (PR)
IRE1270H	Law of Labour Relations
IRE1338H	Law in the Workplace
IRE1362H	Organizational Behaviour
IRE1609H	Strategic Human Resources Management
IRE1610H	Industrial Relations
IRE1700H	HR Consulting Models, Practices, and Applications (PR)
IRE2001H	Foundations and Current Issues in Industrial Relations and Human Resources

IRE2002H	Research Methods for Industrial Relations and Human Resources (PR)
IRE2003H	Research Project in Industrial Relations and Human Resources (PR)
IRE2004H	Data Analytics and Metrics for Industrial Relations and Human Resources (PR)
IRE3002Y	Research Seminar I
IRE3003H	Research Seminar II (PR)
IRE3004H	Special Topics in Employment and Industrial Relations
IRE3005H	Workshop in Industrial Relations I (Credit/No Credit)
IRE3006H	Workshop in Industrial Relations II (Credit/No Credit)
RSM3062H	Methods and Research in Organizational Behaviour

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

IRE1260H	Seminar on Labour Arbitration (PR)
IRE1270H	Law of Labour Relations
IRE1338H	Law in the Workplace
IRE1600H	International Developments in Labour and Human Resource Policy (PR)
IRE1611H	Sociology of Work and Organizations
IRE1615H	Labour and Globalization (PR)
IRE1620H	Labour Relations Problems in Historical Perspective
IRE1625H	Contemporary Issues in Public Sector Labour-Management Relations (PR)
IRE1630H	Negotiation Skills, Theory, and Practice (PR)
IRE1635H	Collective Bargaining (PR)
IRE1640H	Contemporary Trade Unionism: Issues, Challenges, Strategy (PR)
IRE1650H	Managing Workplace Conflict (PR)
IRE1655H	Health and Safety
IRE1715H	Special Topics in Industrial Relations and Human Resources
IRE1720H	Managing Organizational Change (PR)
IRE1725H	Cross Cultural Differences in Organizational Contexts (PR)
IRE1730H	Contemporary Challenges Facing Today's Organizations (PR)
IRE2021H	Business Strategy for IR/HR
IRE3615H	Performance Management Systems (PR)
IRE3635H	Compensation (PR)
IRE3640H	Recruitment and Selection (PR)
IRE3645H	Training and Development (PR)
IRE3650H	Human Resource Planning and Strategy (PR)
IRE3655H	Leadership (PR)

Adult Education and Counselling Psychology

APD1268H	Career Counselling and Development: Transition in Adulthood
LHA1101H	Program Planning in Adult Education
LHA1148H	Introduction to Workplace, Organizational, and Economic Democracy

Economics

ECO3800H	Labour Economics I
ECO3801H	Labour Economics II

Management

RSM2129H	Forecasting Models and Econometric Methods
RSM2612H	Managing Talent for Global Operations
RSM2615H	Special Topics in Organizational Behaviour and Human Resource Management

Political Science

POL2307H	The Political Economy of Technology: from the Auto-Industrial to the Information Age

Public Health Sciences

CHL5904H	Perspectives in Occupational and Environmental Health — Legal and Social Context

Sociology

SOC6003H	Immigration II
SOC6012H	Work, Stratification, and Markets I

Other Elective Courses

With the approval of the Graduate Coordinator, students may register in the following credit/no-credit course:

IRE4000H	Work Term in IR/HRM (Credit/No Credit)

Reading Courses

In certain circumstances, and with the approval of the Graduate Coordinator, students may be allowed to take a reading or research course:

IRE1090H	A reading course or individual research in an approved field
IRE2090H	A reading course or individual research in an approved field

Information

Information: Introduction

Faculty Affiliation

Information

Degree Programs

Information

MI

- Concentrations:
  - 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)

PhD

- Concentrations:
  - Archives and Records Management;
  - Critical Information Policy Studies;
  - Cultural Heritage;
  - Information Systems and Design;
  - Knowledge Management and Information Management;
  - Library and Information Science;
  - Media, Technology, and Culture;
  - Philosophy of Information

Museum Studies

MMSt

Combined Degree Programs

- STG, Law, JD / MI
- STG, MI /MMSt

Diploma Program

Information Studies

GDipISt, 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
  - Information, MI, PhD
- Book History and Print Culture
  - Information, MI, PhD
  - Museum Studies, MMSt
- Environmental Studies
  - Information, MI, PhD
- Food Studies
  - Information, MI
  - Museum Studies, MMSt
- Jewish Studies
  - Information, PhD
  - Museum Studies, MMSt
- Knowledge Media Design
  - Information, MI, PhD
  - Museum Studies, MMSt
- Sexual Diversity Studies
  - Information, MI, PhD
  - Museum Studies, MMSt
- Women and Gender Studies
  - 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
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Information: Graduate Faculty

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Battershill, Claire - PhD
Becker, Christoph - BSc, MSc, DSc
Boase, Jeffrey - BA, MA, PhD
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 Malaika - 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
Krmpotich, Cara - PhD
Kuzminykh, Anastasia - PhD
Luka, MaryElizabeth - BA, BAA, PhD
Lyons, Kelly - BSc, MSc, PhD
MacNeil, Heather - PhD ***(Associate Dean, Academic)***
McEwen, Rhonda - PhD
Mihalache, Irina - BA, MA, PhD
Nieborg, 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
Smith, Brian Cantwell - BS, MS, PhD
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
Owen, Victoria - AB, MLS
Pandeliev, Velian - MSc, MSc
Senderovich, Arik - PhD
St-Cyr, Olivier - 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 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.

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, INF2175H, INF2176H, and INF2186H).
- 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);

CCO and executive delivery option: 6 sessions (2 years) full-time (typical registration sequence: F/W/S/F/W/S);
11 sessions (5.5 years) part-time

Time Limit

3 years full-time;
6 years part-time

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.

INF1001H	Knowledge and Information in Society
INF1003H	Information Systems, Services, and Design
INF1005H	Information Workshop I
INF1006H	Information Workshop II
INF1230H	Management of Information Organizations
INF1240H	Research Methods
INF1300H	Foundations in Library and Information Science
INF1310H	Introduction to Reference
INF1320H	Knowledge Organization
INF1321H	Representing, Documenting, and Accessing the Cultural Record
INF1322H	Communities and Values

INF1323H	The Information Experience
INF1324H	Critical Infrastructures
INF1325H	Online Information Retrieval
INF1330H	Archives Concepts and Issues
INF1331H	Archival Arrangement and Description
INF1339H	Introduction to Computational Thinking
INF1340H	Programming for Data Science
INF1341H	Systems Analysis and Process Innovation
INF1342H	System Requirements and Architectural Design
INF1343H	Data Modeling and Database Design
INF1344H	Introduction to Statistics for Data Science
INF1501H	Culture and Technology I
INF1502H	Culture and Technology II (prerequisite: INF1501H)
INF1601Y	User Experience Design Capstone Project (Credit/No Credit)
INF1602H	Fundamentals of User Experience
INF2010H	Reading Course
INF2011H	Reading Course
INF2040H	Project Management
INF2102H	Geographic Information Systems (GIS) in Libraries
INF2103H	Recordkeeping Cultures
INF2110H	Design and Evaluation of Information Literacy Programs
INF2115H	Data Librarianship
INF2120H	Conservation and Preservation of Recorded Information
INF2121H	Specialized Archives
INF2122H	Digital Preservation and Curation
INF2124H	Surveillance and Identity
INF2126H	Public Library Services to Culturally Diverse Communities
INF2127H	Collection Development, Evaluation, and Management
INF2129H	Graphic Novels and Comic Books in the Library
INF2133H	Legal Literature and Librarianship
INF2134H	Business Information Resources
INF2135H	Evidence-Based Healthcare for Librarians
INF2136H	Government Information and Publications

INF2141H	Children's Cultural Texts and Artifacts
INF2143H	Issues in Children's and Young Adults' Services
INF2145H	Creation and Organization of Bibliographic Records
INF2146H	Trusting Records
INF2149H	Administrative Decision-Making in Information Organizations
INF2150H	Legal Issues in Archives
INF2152H	Advocacy and Library Issues
INF2155H	The Public Library in the Community: Developing a Critical Practice
INF2158H	Management of Corporate and Other Special Information Centres
INF2159H	Analytical and Historical Bibliography
INF2161H	History of Books and Publishing
INF2162H	Rare Books and Manuscripts
INF2163H	Data Analysis of Social Networks
INF2164H	UX Research and Design for Video Games (prerequisite: INF1602H)
INF2165H	Accessibility and Inclusive Design
INF2166H	Business Process Management and Mining
INF2167H	R for Data Science
INF2168H	Information Retrieval Systems
INF2169H	User-Centred Information Systems Development
INF2170H	Information Architecture
INF2171H	Usability Assessment: Concepts, Methods, and Tools (exclusions: INF1005H and INF1006H sections on Usability Assessment: Concepts, Methods and Tools)
INF2172H	Readers' Advisory: Reference Work and Resources
INF2173H	Information Professional Practicum (Credit/No Credit)
INF2174H	Histories of Records and Archives
INF2175H	Managing Organizational Records I
INF2176H	Information Management in Organizations — Models and Platforms
INF2177H	Information Management and Systems (prerequisite: INF1341H)
INF2178H	Experimental Design for Data Science (prerequisites: INF1340H and INF1344H)
INF2179H	Machine Learning with Applications in Python (prerequisite: INF1340H)

INF2180H	Archives: Access, Advocacy, and Outreach
INF2181H	Information Policy, Regulation and Law
INF2183H	Knowledge Management and Systems
INF2184H	Appraisal for Records Retention and Archives Acquisition
INF2185H	Libraries, Archives, Museums: Intersections and Tensions
INF2186H	Metadata Schemas and Applications
INF2187H	Personal Recordkeeping and Private Papers (prerequisite: INF1330H)
INF2190H	Data Analytics: Introduction, Methods and Practical Approaches
INF2191H	User Interface Design
INF2192H	Representing UX
INF2194Y	Information Systems Design Project
INF2195H to INF2199H	Special Topics in Information
INF2200H	UX Leadership and Influence
INF2201H	Information and Communication Technologies, Design, and Marginality
INF2210H	Human Values in Data Science
INF2221H	Digital Divides and Information Professionals: Developing a Critical Practice
INF2225H	Digital Discourse
INF2226H	Queer GLAM
INF2230H	Just Sustainability Design
INF2235H	Outer Space and the City (exclusions: INF1005H and INF1006H sections on Space and the City)
INF2240H	Political Economy and Cultural Studies of Information
INF2241H	Critical Making: Information Studies, Social Values, and Physical Computing
INF2242H	Studying Information and Knowledge Practice
INF2243H	Critical Histories of Information and Communication Technologies
INF2245H	Platform: Global Histories, Practices, and Theories
INF2300H to INF2310H	Special Topics in Information
INF2311H	Managing Audiovisual Materials
INF2312H	Art Librarianship: Theory Informs Practice
INF2313H	Introduction to Service Science
INF2314H	Program Evaluation
INF2315H	Digital Labour
INF2316H	Critical Studies of Social Media
INF2317H	Privacy Studies
INF2318H	Platform Politics and Power
INF2319H	Critical Approaches to Multiculturalism, Information, and Social Integration
INF2320H	Remix Culture
INF2325H	Launching Information Ventures
INF2330H	Information Ethnography
INF2331H	The Future of the Book
INF2332H	Information Behaviour
INF2400H to INF2410H	Special Topics in Information
INF3900H	The Emerging Professional
INF3902H	Co-operative Workplace Placement I
INF3903H	Co-operative Workplace Placement II
JDM3619H	Digital Media Distribution
JIE1001H	Seminar in Identity, Privacy, and Security

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 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 fulfil 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).
  - A methods course (0.5 FCE): INF3012H *Social Scientific Methods for Media* **or** INF3014H *Cultural Interpretive Methods for Media and Technology*. Course selection to be determined in consultation with the student's research advisor.
  - INF3009H *Theory and History of Media Technology* (0.5 FCE).
  - INF3010H *Power, Media, and Technology* (0.5 FCE).
  - 2.0 FCEs in elective courses relevant to media, technology, and culture (see elective list below).
- Students in **all other concentrations** must complete **4.0 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.
- Students in all concentrations must:
  - Complete other courses appropriate for the student's research.
  - Pass a qualifying exam.
  - Present and defend a thesis research proposal.
  - Complete a thesis and pass a Doctoral Final Oral Examination.
  - Be regularly registered in the School of Graduate Studies during each year of the program.

Program Length

4 years

Time Limit

6 years

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 fulfil 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 fulfil the academic requirements for an advanced research degree. Students must spend at least two full-time sessions on campus.

Program Length

6 years

Time Limit

8 years

Information: Information PhD Courses

INF3001H	Research in Information: Foundations
INF3003H	Research in Information: Frameworks and Design
INF3006Y	Major Area Reading Course
INF3009H	Theory and History of Media Technology
INF3010H	Power, Media, and Technology
INF3012H	Social Scientific Methods for Media
INF3014H	Cultural Interpretive Methods for Media and Technology
INF3015H	Reading Course
INF3100H	Special Topics in Information (Credit/No Credit)
INF3101H	Special Topics in Information

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 up to four graduate half courses (2.0 FCEs) 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)

MSL1150H	Collection Management
MSL1230H	Ethics, Leadership, Management
MSL2331H	The Museum Exhibition: Histories, Practices, Genres
MSL2370H	Museums and Cultural Heritage: Context and Critical Issues
either MSL2350H *or* INF2040H	Museum Planning and Management: Projects and Fundraising Project Management
either MSL4000Y *or* Thesis option	Exhibition Project

MMSt Elective Courses

Internal (Museum Studies) Elective Courses

MSL1300H	Contemporary Theories of Art and Culture
MSL1350H	Museums and their Publics
MSL2000H	Curatorial Practice
MSL2050H	Curating Science
MSL2100H	Museum Environment
MSL2115H	Global Cultures and Museums
MSL2230H	Nature and Culture: Histories of Heritage Interpretation in North America
MSL2235H	Equity, Diversity, and Inclusion in the GLAM Sector
MSL2240H	The Photographic Record
MSL2255H	Social Digital Memory

MSL2301H to MSL2310H	Special Topics in Museum Studies
MSL2325H	Museums and New Media Practice
MSL2330H	Interpretation and Meaning Making in Museums
MSL2332H	Public Programs and Education
MSL2340H	Issues in Cultural Policy and Contemporary Culture
MSL2360H	Museums and Indigenous Communities: Changing Relationships, Changing Practice
MSL2500H	Constructing and Curating Digital Heritage
MSL3000H	Internship (prerequisite: MSL3900H)
MSL3900H	The Emerging Museum Professional
MSL5050H	Special Studies

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.

C&T1006H	Media, Mind, and Society I
C&T1008H	Media, Mind, and Society II
C&T1009H	New Media and Policy

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
Pierno, 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:
  - ITA1000H *Methodologies for the Teaching and Study of Italian* (0.5 FCE)
  - 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:
  - ITA1000H *Methodologies for the Teaching and Study of Italian* (0.5 FCE)
  - 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:
  - 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 **4.0 full-course equivalents (FCEs)** as follows:
  - 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.
  - 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.

ITA1000H	Methodologies for the Teaching and Study of Italian (Credit/No Credit)
ITA1001Y	Colloquia and Professional Development (Credit/No Credit)
ITA1025H	Old Italian
ITA1030H	Italian Lexicography
ITA1031H	History of Italian Language in North America
ITA1165H	Introduction to Italian Philology
ITA1177H	The Italian Questione della Lingua
ITA1200H	Dante
ITA1202H	Dante as a Reader of Augustine's City of God: Augustinian Textual Communities at the Beginning of the 14th Century
ITA1203H	Boccaccio
ITA1235H	Topics in Italian Studies
ITA1330H	Petrarch and Petrarchism
ITA1520H	Renaissance Humanism
ITA1535H	Topics in Italian Literature
ITA1540H	Renaissance Italian Theatre
ITA1550H	Sixteenth-Century Florence
ITA1565H	Tasso
ITA1591H	Baroque Poetics and Poetry
ITA1597H	The Commedia dell'Arte

ITA1601H	Vico
ITA1605H	Theories of the Stage and Dramatic Criticism
ITA1610H	Seventeenth and Eighteenth-Century Theatre
ITA1645H	Post-Tridentine Religious Drama
ITA1650H	Neoclassical and Pre-Romantic Literary Culture
ITA1705H	Pirandello
ITA1710H	Aspects of Modern Italian Poetry
ITA1735H	Topics in Italian Studies I
ITA1736H	Topics in Italian Studies II
ITA1737H	Topics in Italian Studies
ITA1755H	Italian Modernism
ITA1760H	Futurism
ITA1810H	Studies in Italian Literature and Film
ITA1820H	The Mediterranean Noir: A Transnational Approach
ITA1815H	Issues in Italian Film Historiography

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
- Psychophysiological aspects of exercise and stress
- Women's health and physical activity.

Contact and Address

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Graduate Department of Kinesiology
Faculty of Kinesiology and Physical Education
University of Toronto
55 Harbord Street
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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(PT), BPHE, PhD, ScD
Corey, Paul - BSc, MA, PhD
Darnell, Simon - BA, MA, PhD
Faulkner, Guy - BE, MSc, DPhil
Fernie, Geoffrey - BSc, PhD
Fusco, Caroline - BA, MSc, PhD
Gillen, Jenna - BPHE, PhD
Goodman, Jack - BPHE, MSc, PhD
Heslegrave, Ronald - PhD
Hutchison, Michael - BPHE, MSc, PhD
Jacobs, Ira - MHK, MSD, 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
Shephard, Roy - BSc, BS, MB, MD, PhD

Associate Members

Bentley, Robert Francis - DPhil
Burd, Nicholas - PhD
Burdsey, Daniel - PhD
Courtney-Martin, Glenda - BASc, MSc, PhD
Courtney, Brian - MD
Howarth, Samuel
Jarvie, Grant - PhD
Johnston, Adam - PhD
Langelier, David - MD
Marzolini, Susan - BS, MSc, PhD
Mertens, Luc - MD
Mittal, Nimish - MD
Neyedli, Heather Fern
Oh, Paul - MSc, MD
Pila, Eva - BS, MHSc, PhD
Randall, Ian - BASc, MD
Rhodes, Ryan - BA, MPE, PhD
Richards, Doug - MD, DipSportMed
Sasson, Zion - MD
Schneiderman, Jane - BE, MS, PhD
Sprenger, Heather - BSc, PhD
Stirling, Ashley - BPHE, MS, PhD ***(Vice-Dean, Academic Affairs)***
Taha, Timur - BA, MEd, PhD
Vescovi, Jason - BS, MSc, PhD
West, Daniel - BSc, 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.

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.

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 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).

- 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.

KIN1150H	Safeguarding Youth in Sport
KIN1152H	Psychological Issues in Sport-Related Concussion
KIN5502H	Aging and Functional Capacity: an Integrative Approach
KIN5503H	Adaptations to Habitual Activity

KIN5505H	Neuromotor Behaviour
KIN5507H	Desire and Bodies in Place
KIN5508H	Cardiovascular Disease and Exercise
KIN5509H	Applied Muscle Physiology and Biochemistry
KIN5510H	Qualitative Inquiry and Physical Cultural Studies
KIN5513H	Current Issues in Exercise Psychology
KIN5514H	Human Sensory and Motor Neurophysiology
KIN5515H	Research Methods in Physical Activity and Health
KIN5518H	Physical Cultural Studies and Social Theory
KIN5521H	Stress and Coping
KIN5525H	Quantitative Motion Analysis
KIN5530H	Extreme Human Physiology
KIN5531H	Skeletal Muscle Plasticity
KIN5532H	Knowledge Translation
KIN5533H	Current Issues in Sport Psychology
KIN5534H	Sport, Politics, and Social Development
KIN5535H	Neurorehabilitation and Exercise
KIN5536H	Qualitative Inquiry in Sport and Physical Activity
KIN5537H	Health, Media, and Social Change
KIN5538H	Special Topics in Exercise Oncology
KIN5539H	Advanced Disordered Movement and Neurorehabilitation
KIN5540H	Narrative Methods in Health Research
KIN5541H	Advanced Exercise Metabolism
KIN5542H	Special Topics in Sport-Related Concussion
KIN5543H	Lifestyle Toxicity and Chronic Disease
KIN5544H	Decolonizing Sport Studies
KIN5546H	Oxygen Delivery and Exercise Performance
KIN7001H	Directed Reading in Kinesiology
KIN7002H[+]	Directed Research Project in Kinesiology
SRM3335H[+]	Master's Seminar Series — Compulsory Attendance
SRD4445H[+]	Doctoral Seminar Series — Compulsory Attendance

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

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.

MPK4000Y	Introduction to Professional Kinesiology
MPK4001Y	Clinical Assessment and Interventions
MPK4002Y	Biophysical Assessment and Interventions
MPK4003Y	Behavioral Assessment and Interventions
MPK4004Y	Physical, Culture, Health, and Social Environments
MPK4005Y	Strength Based Professional Practice
MPK4006H+	Interprofessional Practice
MPK4007Y	Practice Setting Considerations
MPK4008Y	Evidence Supported Practice
MPK4009H	Business of Kinesiology and Entrepreneurship
MPK4010H+	Professional Practice
MPK4012Y	Capstone Project: Improving Kinesiology Practice
MPK4015H	Practice and Program Evaluation
MPK8002H	Placement 1 (300 hours)
MPK8003H	Placement 2 (300 hours)

+ *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

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Translational Research in the Health Sciences Program

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Canada

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
Bendeck, Michelle - BSc, PhD
Boggs, 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, MASc, 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
Gallinger, 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
Hazrati, 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, Suneil - BSc, MD, PhD
Kamel-Reid, Suzanne - BA, MA, 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
Ohh, 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, Srinivasan - BSc, MA, PhD
Rand, Margaret - BSc, PhD
Richardson, Susan - BSc, MDCM
Robbins, Clinton Shane - BS, PhD
Robertson, Janice - BSc, PhD
Rosenblum, Norman - MD
Rozakis-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, Saravanamuttu - 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, Julianne - 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
Pollanen, 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

sciences, preferably with a major or specialist program in the life sciences. These programs prepare students for the study of biomedical science, for fluency in biomedical terminology, and for critical evaluation of biomedical literature. Courses in human anatomy and physiology are desirable.
    - All potential students will be interviewed prior to final acceptance into the program. The initial selection of students will be based on a combination of their academic record, individual statement, and letters of reference. These students will be asked to participate in an interview with the program coordinator to determine the fit with the program and student's goals.
- 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^0 *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)
        - MSC1008H *Advanced Human Embryology and Teratology* (0.5 FCE)
    - 1.5 FCEs of practicum courses
        - LMP2108H *CE Lab Simulation I* (0.5 FCE)
        - LMP2109H *CE Lab Simulation II* (0.5 FCE)
        - LMP2110H *ART Lab Rotations* (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.

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^0 *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

[0] Course that may continue over a program. The course is graded when completed.

LMP: Laboratory Medicine MHSc Courses

Not all courses are offered every year. Please check the departmental website for course availability.

Core Courses

LMP2000H	Cell and Molecular Biology
LMP2001H	Biomedical Research Methods
LMP2002H	Clinical Laboratory Management
LMP2003H	Biomedical Ethics
LMP2004H	Biostatistics
LMP2005Y[0]	Capstone Project in Laboratory Medicine (prerequisites: PA field: LMP2200H, LMP2201H, LMP2202H, LMP2203H; CE field: LMP2100H, LMP2102H, LMP2103H, LMP2104H, MSC1008H)

[0] Course that may continue over a program. The course is graded when completed.

Clinical Embryology Courses

LMP2100H	Advanced Reproductive Physiology and Pathology
LMP2102H	Foundations in ART (Assisted Reproductive Technology) (prerequisite: LMP2100H)
LMP2103H	Reproductive Genetics (prerequisites: LMP2000H, LMP2100H)
LMP2104H	Applied Methods in ART (prerequisite: LMP2102H)
LMP2105H	Innovations in ART (prerequisites: LMP2000H, LMP2001H, LMP2002H, LMP2003H, LMP2004H, LMP2102H, LMP2103H, LMP2104H)
LMP2106H	Current Topics in Causes and Treatment of Infertility (prerequisites: LMP2100H, LMP2102H)
LMP2107H	Applied ART Laboratory Decision Making (prerequisites: LMP2001H, LMP2003H, LMP2004H, LMP2102H, LMP2104H; corequisite: LMP2105H)
LMP2108H	Clinical Embryology Laboratory Simulation I (prerequisites: LMP2102H, LMP2104H, LMP2107H)
LMP2109H	Clinical Embryology Laboratory Simulation II (prerequisites: LMP2102H, LMP2104H, LMP2107H)
LMP2110H	ART Lab Rotations
MSC1008H	Advanced Human Embryology and Teratology

Pathologists' Assistant Courses

LMP2200H	Basic Principles in Human Pathobiology and Pathophysiology
LMP2201H	Anatomy and Pathology of Organ Systems
LMP2202H	Practicum in Surgical Pathology I
LMP2203H	Practicum in Surgical Pathology II
LMP2204H	Practicum in Surgical Pathology III
LMP2205H	Practicum in Surgical Pathology IV
LMP2206H	Practicum in Autopsy Pathology
LMP2207H	Practicum in Forensic Pathology
LMP2208H	Biobanking for Research
LMP2209H	Practicum in Surgical Pathology V
LMP2210H	Practicum in Surgical Pathology VI
LMP2211H	Advanced Anatomy Dissection (prerequisite: LMP2200H)

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

LMP: Laboratory Medicine and Pathobiology PhD

Doctor of Philosophy

Program Description

The PhD 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.

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.

A limited number of selected students may enter the combined degree program in Medicine, Doctor of /Doctor of Philosophy (MD/PhD) subject to admission into both the departmental PhD program and the MD 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 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^0 *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

[0] 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[0] *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

[0] 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[0] *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

[0] 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.

LMP1001H	Student Seminar I (Credit/No Credit)
LMP1002H	Student Seminar II (Credit/No Credit)
LMP1003H[0]	Student Seminar III (Credit/No Credit)
LMP1005H	Fundamentals of Research Practice (Credit/No Credit)
LMP1100H (0.25 FCE)	Cellular Imaging in Pathobiology
LMP1101H (0.25 FCE)	Basic Concepts in Inflammatory/Autoimmune Arthritis
LMP1102H (0.25 FCE)	Clinical Concepts in Inflammatory/Autoimmune Arthritis
LMP1103H (0.25 FCE)	Tissue Injury, Repair, and Regeneration
LMP1104H (0.25 FCE)	Current Understanding of Ischemic Heart Disease
LMP1105H (0.25 FCE)	Current Understanding of Atherosclerosis
LMP1106H (0.25 FCE)	Molecular Biology Techniques
LMP1107H (0.25 FCE)	Bioinformatics in LMP
LMP1108H (0.25 FCE)	Genomic Analysis in Medicine
LMP1109H (0.25 FCE)	Advanced Concepts in Cancer Biology
LMP1110H (0.25 FCE)	Neural Stem Cells: Brain Development and Maintenance
LMP1200H	Neoplasia
LMP1201H	Research Techniques in Molecular Biology and Pathobiology
LMP1202H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP1203H	Analytical Clinical Biochemistry: Basic Principles
LMP1204H	Translational Research in Pathobiology
LMP1205H	The Role of Genomics in the Era of Personalized Medicine
LMP1206H	Next Generation Genomics in Clinical Medicine
LMP1207H	Mass Spectrometry, Proteomics, and Their Clinical Applications
LMP1208H	Molecular Clinical Microbiology and Infectious Diseases
LMP1209H	Neurodegenerative Disease — Mechanisms, Models, and Methods
LMP1210H	Basic Principles of Machine Learning in Biomedical Research
LMP1300Y	General and Special Pathology (for Oral Pathology Residents only)

[0] 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)
    - LMP2330Y[+] *Capstone Project in Translational Research* (2.0 FCEs, Summer).
  - Years 1 and 2:
    - 2.0 FCEs: eight modular courses (0.25 FCE each).
  - Year 2:
    - LMP2330Y[+] *Capstone Project in Translational Research* (Fall and Winter)
    - 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

LMP2300Y	Foundations in Translational Research
LMP2301Y	Projects in Translational Research
LMP2320H	Overview of Methods in Practices and Contexts
LMP2322H	Information, Media, and Communication Literacy for the Sciences
LMP2330Y[+] (2.0 FCEs)	Capstone Project in Translational Research

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

Modular Courses (0.25 FCE each)

LMP2340H	Project Management I
LMP2341H	Project Management II
LMP2342H	Intellectual Property Fundamentals
LMP2343H	Applied Intellectual Property
LMP2344H	Translational Thinking
LMP2345H	Procurement, Privacy, and Regulatory Affairs
LMP2346H	Grant Writing

LMP2347H	Economics of Healthcare
LMP2348H	Knowledge Translation and the Community
LMP2349H	Student Work and Research Module (SWARM)
LMP2350H	Professionalism
LMP2351H	Leadership
LMP2352H	Intrapreneurship, Entrepreneurship, and Business Model Design
LMP2353H	Introduction to AI in Healthcare
LMP2354H	Hacking Network
LMP2355H	Business Thinking (Credit/No Credit)
LMP2390H	Selected Topics (Credit/No Credit)

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, LLD
Dyzenhaus, David - BA, LLB, DPhil
Emon, Anver - LLB, BA, LLM, MA, PhD, SJD, CRC
Essert, Christopher - BA, LLM, JD, SJD
Fadel, Mohammad - BA, JD, PhD
Fernandez, Angela - LLB, BA, BCL, LLM, MA, SJD
Flood, Colleen - LLB, LLM, SJD
Green, Andrew - LLB, BA, LLM, MA, PhD, Metcalf Chair in Environmental Law
Hadfield, Gillian - BA, JD, PhD, Schwartz/Reisman Chair
Iacobucci, Edward - LLB, MPH, Toronto Stock Exchange Chair in Capital Markets
Katz, Ariel - LLB, LLM, SJD
Katz, Larissa - BA, LLB, LLM, SJD, CRC
Knop, 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
Valcke, Catherine - BCL, LLB, LLM, SJD
Valverde, Mariana - BA, MA, PhD, FRSC
Waddams, Stephen - BA, LLB, BA, LLM, PhD, SJD
Weinrib, Ernest - BA, LLB, PhD, Cecil A. Wright Chair
Weinrib, Lorraine - BA, LLB, LLM
Yoon, Albert - BA, LLB, MA, PhD, Chair in Law and Economics

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.
- 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** 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 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 (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: lawUGadm@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.

Contact

Master 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 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:
  - 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 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 or
  - 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

LAW1000H	Alternative Approaches to Legal Scholarship
LAW1001Y	First Year: Contracts Law (MSL only)
LAW1002Y	Contracts
LAW1003Y	First Year: Criminal Law (MSL only)
LAW1004Y	Criminal Law
LAW1005Y	First Year: Property Law (MSL only)
LAW1006Y	Property
LAW1007Y	First Year: Torts Law (MSL only)
LAW1008Y	Torts
LAW1009Y	First Year: Constitutional Law (MSL only)
LAW1010Y	Constitutional Law
LAW1011Y	First Year: Constitutional Law (MSL only)
LAW2001H	Advanced Contracts: The Law of Contractual Interpretation
LAW2002H	Advanced Corporate Law and Securities Regulation
LAW2003H	Advanced Labour Law: Bargaining Rights and Following Rights in a Global Economy
LAW2005H	The Art of the Deal
LAW2007H	Bankruptcy Law
LAW2007Y	Bankruptcy and Insolvency Law
LAW2008H	Business Organizations
LAW2009Y	Canadian Income Tax Law
LAW2010H	Class Action Law
LAW2011H	Climate Change Law
LAW2013H	Competition Law and Intellectual Property
LAW2014H	Competition Policy
LAW2015H	Contested Corporate Transactions
LAW2017Y	Corporate Income Tax
LAW2018H	Corporate Transactions
LAW2019H	Corporations, Individuals, and the State
LAW2020H	Digital Content and the Creative Economy
LAW2021H	Economic and Social Regulation
LAW2022H	Entertainment Law
LAW2023H	Environmental Law
LAW2024Y	Evidence
LAW2026H	Franchise and Distribution Law
LAW2027H	From Blueprints to Buildings: Legal Issues in the Construction Industry
LAW2029H	Governing Governance: Legal Institutions and Corporate Performance in Comparative Perspective
LAW2033H	Intensive: Key Concepts in Trademark Law

LAW2035H	International Commercial and Investor-State Arbitration
LAW2036H	International Investment Law
LAW2037H	International Taxation
LAW2038H	International Trade Regulation
LAW2039H	Investment and Growth in Emerging Markets
LAW2040Y	Labour and Employment Law
LAW2042H	Law of Good Governance and Ethics in Government and Business
LAW2044H	Legal History of Money
LAW2045H	Natural Resources and Energy Law
LAW2046H	Negotiation
LAW2047H	Patent and Trade Secrets Law
LAW2048H	New Directions in Energy Regulation
LAW2049H	Principle and Policy in Contract Law
LAW2051H	Real Estate Law
LAW2053Y	Secured Transactions
LAW2054H	Securities Law in Adversarial Setting
LAW2055H	The Supreme Court of Canada: A Unique and Comprehensive View
LAW2056H	Shareholder Activism
LAW2057H	Sustainability and Corporate Social Responsibility
LAW2059H	Venture Capital Financing
LAW2060H	Workshop: Innovation Law and Policy
LAW2061H	Intensive Course: Corporations, Individuals, and the State
LAW2062H	Applied Corporate Law
LAW2063H	Banking, Negotiable Instruments, and Payment Mechanisms
LAW2064H	Fundamental Themes in Securities Litigation Practice
LAW2065H	Innovation, Intellectual Property, and the Internet
LAW2066H	Law of International Business and Finance Transactions
LAW2067H	Powering the Green Economy: New Directions in Energy Regulation
LAW2068H	The Private Sector in Economic Development
LAW2069H	Regulation of Financial Institutions
LAW2070Y	Intellectual Property: Copyright, Trademark, and Patent
LAW2072H	Data and Governance
LAW2075H	Intensive Course: Consumer Contracts in the Information Society: A Comparative Overview
LAW2076H	Securities Litigation: The Public and Private Enforcement of Securities Law
LAW2085Y	Trusts
LAW3001H	Aboriginal Peoples and Canadian Criminal Justice
LAW3002H	Aboriginal Peoples and Canadian Criminal Justice Practicum
LAW3003H	Advanced Constitutional Law: Comparative Remedial and Security Issues
LAW3004H	Advanced Criminal Evidence
LAW3005H	Advanced Criminal Procedure and Charter Issues
LAW3007H	Comparative Anti-terrorism and National Security Law
LAW3008H	Comparative Criminal Law
LAW3012H	Criminal Law Theory
LAW3013Y	Criminal Procedure
LAW3014H	Criminalization: Use and Abuse
LAW3015H	Criminalization in Historical and Theoretical Perspective
LAW3017H	Financial Crimes
LAW3018H	Forensic Evidence: Science, Medicine, and the Law
LAW3019H	History of Crime and Punishment
LAW3020H	Homicide
LAW3021H	Issues in Criminal Justice
LAW3023H	Mentally Disordered Accused
LAW3025H	Sentencing and Penal Policy
LAW3026H	Women, Violence, and the Law
LAW3027H	Wrongful Convictions
LAW3028H	Youth Criminal Justice
LAW3029H	Crime and Punishment: Mandatory Minimums, the Death Penalty, and Other Current Debates
LAW3030H	International Criminal Law
LAW3031H	Perspectives on Crime and Law
LAW3032H	Intensive Course: "Black Lives Matter" and Criminal Procedure: Race and the Fourth Amendment
LAW3033H	Law and Society: Theoretical Perspectives
LAW3034H	Homelessness
LAW3035H	Intensive Course: Punishing Genocide: An Introduction to International Criminal Law

LAW4001H	Law and Business in a Global Economy
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
LAW4007H	Canadian Administrative Law
LAW4008H	Canadian Constitutional Law
LAW4009H	Canadian Criminal Law
LAW4010H	Foundations of Canadian Law
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
LAW4016H	Corporate Social Responsibility, Ethics, and the Law
LAW4017H	Professional Responsibility
LAW4018H	Foundations of Legal Theory
LAW4019H	Anti-Corruption Law: International, Domestic, and Practical Perspectives
LAW5002H	Advanced Private Law
LAW5003H	Authorship and Copyright: Theory and History
LAW5004H	Civil Law
LAW5005H	Comparative Constitutional Law and Politics
LAW5006H	Comparative Law Theory
LAW5007H	Workshop: Contemporary Problems in Legal Theory
LAW5008H	Crime and Punishment
LAW5011H	Critical Theory and Global Law: Resisting Economic Globalization
LAW5012H	Empirical Studies Seminar
LAW5014H	History and Theory of the Common Law
LAW5017H	Ethics, Value Pluralism, and International Justice
LAW5018H	Property Theory
LAW5020H	Trademark Theory
LAW5021H	Introduction to Contemporary Legal Theory
LAW5022H	Introduction to Islamic Law
LAW5024H	Judgement in Law and Politics
LAW5025H	Kant's Philosophy of Law
LAW5026H	The Law of Democracy
LAW5027H	Law and Literature
LAW5028H	Law and Multiculturalism
LAW5029H	Law, Religion, and Public Discourse
LAW5030H	Legal Archaeology: Studies in Cases in Context
LAW5032H	Modern Political Trials
LAW5033H	Peoples and Minorities in International Law
LAW5034H	Political Justice and Liberal Democracy
LAW5037H	Religion and the Liberal State: The Case of Islam
LAW5039H	Restitution
LAW5040H	Rights
LAW5042H	Theories of Equality
LAW5043H	Theory of Contract Law
LAW5044H	Theory of Private Law: Selected Topics and Texts
LAW5045H	Critical Analysis of Law Workshop
LAW5047H	Law and Economics Workshop Seminar
LAW5048H	From Patriarchy to Equal Citizenship
LAW5049H	History and Theory of International Law
LAW5050H	Introduction to Legal Philosophy
LAW5051H	Workshop: Legal History Seminar
LAW5052Y	Political Theory of Hegel
LAW5053H	Workshop: Legal Theory
LAW5054H	Intensive Course: Constitutional Theory
LAW5055H	Intensive Course: Purposive Interpretation in Law
LAW5056H	Intensive Course: The Adversarial Trial: Theory and Critique
LAW5057H	John Rawls' Theory of Justice: An Introduction
LAW5058H	Law, Religion, and Democracy
LAW5059H	Philosophical Approaches to Equality and Discrimination
LAW5060H	Sanctity of Contracts in a Secular Age
LAW6001H	Contemporary Issues in Health Law and Policy
LAW6002H	Governance of Pharmaceuticals in the International Context
LAW6003Y	Health Law and Bioethics

LAW6004H	Comparative Health Systems Law and Policy
LAW6005H	Intellectual Property, Medicine, and Health
LAW6006H	Public Health Law
LAW6007H	Patent Law for Life Sciences
LAW6010H	Scientific Evidence: Its Use and Abuse in Law
LAW6012H	Reproductive and Sexual Health Law
LAW6013H	Law and Policy of Biotechnology
LAW6015Y	Administrative Law
LAW6019H	Privacy Law
LAW6020H	International Intellectual Property Law
LAW6021H	Women's Rights in Transnational Law
LAW6023H	International Human Rights Law
LAW6024H	Human Rights and Global Justice
LAW6025H	Law and Policy of Public Private Partnerships
LAW6026H	Law, Institutions, and Development
LAW6029Y	International Human Rights Clinic
LAW6030H	Law of Mental Health
LAW6031H	Occupational Health and Safety
LAW6032H	Health Systems Law and Policy
LAW6042H	Human Rights and Their Critics
LAW6045H	Intensive Course: Pandemics and the Law
LAW7000Y	Securities Regulation
LAW7001H	Legal Process Professionalism and Ethics
LAW7002H	Advanced Civil Procedure
LAW7003Y	Administrative Law
LAW7004H	Admiralty Law
LAW7005Y	Trial Advocacy
LAW7006H	Advanced Torts
LAW7007H	Tax Law and Policy Workshop
LAW7008H	Private International Law
LAW7009H	Perspectives on Law
LAW7010H	Broadcasting Law and Policy
LAW7011H	Telecommunications and Internet Law
LAW7012H	Community Planning
LAW7013H	International Environmental Law
LAW7014H	Advanced Property Law
LAW7015Y	Charter Litigation 101
LAW7016H	Fiduciary Law
LAW7017H	Trusts
LAW7018Y	Family Law
LAW7019H	Finance and Accounting in Business Law
LAW7020H	Introduction to Animal Law
LAW7021H	Sports Law
LAW7022H	Human Rights as Law, Ethics, and Politics
LAW7023H	Public Sector Labour Law
LAW7024H	Citizenship: Inside and Out
LAW7025H	Citizenship, Immigration, and Globalization
LAW7026H	Labour Law Writers Workshop
LAW7027H	Introduction to the Legal System of the People's Republic of China
LAW7028H	Municipal Plan and Environmental Law
LAW7029H	Remedies
LAW7030H	Issues in Aboriginal Law and Policy
LAW7031H	Legal Ethics and Lawyer Regulation Intensive
LAW7032H	Idea to Legislation: Policy and Legislative Change
LAW7033H	Perspectives on Civil Litigation, Procedure, and Professionalism
LAW7034H	Education Law
LAW7035H	Advanced Legal Research, Analysis, and Writing
LAW7036H	Foreign Affairs and the Canadian Constitution
LAW7037H	Litigation and Social Change
LAW7038H	Advanced Family Law: Resolving Family Law Case
LAW7039H	Advanced Aboriginal Studies
LAW7040H	Constitutional Law of the U.S.
LAW7041Y	Feminist Theory
LAW7042Y	Clinical Legal Education: Health Equity and Law Clinic
LAW7043H	Proportionality, Constitutional Rights, and Their Limitations
LAW7044H	Wills and Estate Planning
LAW7045H	Exploring the Intersections of Law and Social Work
LAW7046H	Freedom of Expression and Press
LAW7047H	Introduction to Law and Development
LAW7048H	Canadian Legal History: The Development of Legal Doctrine in Ontario Court of Appeal
LAW7049H	Legal Ethics

LAW7050H	Comparative Indigenous Law
LAW7051H	Media and Defamation Law
LAW7052Y	Aboriginal Peoples and Canadian Law
LAW7053H	Intensive Course: Who Belongs? Dilemmas of Citizenship and Immigration
LAW7054H	Copyright Law
LAW7055Y	Copyright, Trademark, and Patent Law
LAW7056H	International Criminal Law
LAW7057H	Private Pensions, Public Responsibilities, and Regulation of the Canadian Pension System
LAW7058H	Canadian Legal Methods and Writing
LAW7059H	Contemporary Problems in Legal Theory
LAW7060Y	Discrimination Law
LAW7061Y	Children and Families
LAW7062Y	Constitutional Courts and Constitutional Rights
LAW7063H	Statutes and Statutory Interpretation
LAW7064H	Adhesion Contracts: The Perils of Clicking "I Agree"
LAW7065H	Advanced Advocacy: Problems and Techniques
LAW7066H	Canadian Migration Law
LAW7067H	Class Actions Practice
LAW7068H	Judicial Decision-Making
LAW7069H	Internet Law and Governance
LAW7070H	Economic Analysis of Law
LAW7071H	Youth and the Law
LAW7072H	Constitutional Design for Divided Societies: Theory and Cases
LAW7073H	Student Scholarship Workshop
LAW7074H	Alternative Dispute Resolution in the Legal Environment
LAW7075H	Ethics in the Business Law Setting
LAW7076H	Refugee Law
LAW7077H	Introduction to the Canadian Legal System
LAW7078H	Law of Forced Migration
LAW7079H	Litigation and Dispute Resolution
LAW7080H	Clinical Legal Education Connect Legal
LAW7081H	Foundations of Legal Theory
LAW7082H	International Humanitarian Law (the Law of Armed Conflict)
LAW7083H	Law and Globalization Workshop
LAW7084H	Capstone Course: Intersection Between Criminal and Family Law: Challenges of Concurrent Proceedings
LAW7085H	Capstone Course: the Role of the Judge
LAW7086H	Refugee Rights
LAW7087H	Practice and Theory of Indigenous Law
LAW7088H	Geographies of International Law
LAW7089H	Intensive Course: Brecht: A Case Study in Law and Literature
LAW7090H	Legal Innovation
LAW7091H	Values and Models of Federalism in a Comparative Perspective
LAW7092H	Intensive Course: International Intellectual Property and Development
LAW7093H	Advanced Constitutional Law
LAW7094Y	Public International Law
LAW7103H	Appeals: Principles and Practice
LAW7104H	Indigenous Legal Traditions and the Imperial Response
LAW7105H	Indigenous People and Canadian Courts: Advocacy, Evidentiary, and Ethical Issues
LAW7109H	Intensive Course: Comparative Constitutional Law of Free Expression
LAW7110H	Intensive Course: Constitutional Design in Post Conflict Democracies
LAW7111H	Intensive Course: Feminisms and Pornography, c 1975-1995
LAW7114H	The Legal Profession in Popular Culture
LAW7115H	Intensive Course: snuw'yulh: Indigenous Legal Traditions in the Coast Salish World
LAW7116H	Intensive Course: The Rabbinic Idea of Law
LAW7120H	Intensive Course: Anishinaabe Law in Toronto: Understanding Constitutionalism in Context
LAW7135H	Intensive Course: The Law as a Conversation Among Equals
LAW7136H	Intensive Course: Law and Visual Culture
LAW7137H	Intensive Course: Kayanerenkó:wa, the Haudenosaunee Law of Peace
LAW7138H	Intensive Course: Lawyering for Social Change
LAW7572H	LLM Seminar
LAW8000Y	Thesis
LAW8001H	Directed Research Program (Graduate Students Only)
CHL5704H	International Human Rights Law and Global Health: The Right to Health in Theory and Practice

HAD5765H	Case Studies in Health Policy
HAD5768H	International Perspectives on Health Services Management
HAD5775H	Competition, Cooperation, and Strategy in Health Care
HAD6762H	Health Services Organization and Management Comprehensive Course
JDM3619H	Digital Media Distribution (Credit/No Credit)

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 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:
  - 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:
    - LAW4026H *The Law of Disruptive Technologies and Artificial Intelligence*
  - 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*
  - 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:
  - 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:
    - 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.

LAW4001H	Law and Business in a Global Economy
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
LAW4007H	Canadian Administrative Law
LAW4008H	Canadian Constitutional Law
LAW4009H	Canadian Criminal Law
LAW4010H	Foundations of Canadian Law
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
LAW4016H	Corporate Social Responsibility, Ethics, and the Law
LAW4017H	Professional Responsibility
LAW4018H	Foundations of Legal Theory
LAW4019H	Anti-Corruption Law: International, Domestic, and Practical Perspectives
LAW4020H	Property Law
LAW4021H	Tort Law
LAW4022H	Contract Law
LAW4023H	Business Organizations
LAW4024H	Applied Legal Research and Writing
LAW4026H	The Law of Disruptive Technologies and Artificial Intelligence
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
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
LAW4046H	Privacy and Data Governance
LAW4047H	The Legal Challenges of Digital Environments
LAW4048H	Health, Innovation, and the Law
LAW4049H	Privacy and Freedom of Information
LAW4050H	Perspectives on Leadership and the Law
LAW4051H	Evidence Law
LAW4052H	Law of Software Development and Commercialization
LAW4053H	Law and Regulation of Banks and Financial Institutions
LAW4054H	Management and Resolution of Legal Disputes
LAW4055H	Taxonomy of Innovation: Solving Business Problems and Reducing Legal Friction
LAW4056H	Crisis Management and Leadership
LAW4057H	Cannabis Law and Regulation
LAW4058H	Competition Law
LAW4059H	Digital Trade

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

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

Programs

Web: www.oise.utoronto.ca/lhae
Email: lhae.pa@utoronto.ca
Tel: (Admissions and Programs): (416) 978-0729

Department of Leadership, Higher and Adult Education
Ontario Institute for Studies in Education
University of Toronto
252 Bloor Street West, 6th and 7th Floors
Toronto, Ontario M5S 1V6
Canada

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
Mirchandani, 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 - BOTh, MA, PhD
Scully-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.
  - 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.

LHA1100H	Introduction to Adult Education
LHA1101H	Program Planning in Adult Education
LHA1102H	Community Development: Innovative Models
LHA1103H	Introduction to Research Methods in Adult Education (RM)
LHA1104H	Social Action Education — Community Development, Social Services, and Social Movements
LHA1105H	Introduction to Qualitative Research: Part I (RM)
LHA1106H	Introduction to Qualitative Research: Part II (RM)
LHA1107H	Developing and Leading High Performing Teams: Theory and Practice
LHA1108H	Adult Learning
LHA1109H	Creative Empowerment Work with the Disenfranchised
LHA1110H	Approaches to Teaching Adults
LHA1111H	Working with Survivors of Trauma
LHA1113H	Gender and Race at Work
LHA1114H	Commons, Community and Social Justice
LHA1115H	Learning for the Global Economy
LHA1119H	Creating a Learning Organization
LHA1122H	Practicum in Adult Education and Community Development (Credit/No Credit)
LHA1142H	Young Adulthood in Crisis: Learning, Transitions, and Activism
LHA1143H	Introduction to Feminist Perspectives on Society and Education
LHA1144H	Queer Interventions: Tools for Community Organizing
LHA1145H	Participatory Research in the Community and the Workplace (RM)
LHA1146H	Women, War, and Learning
LHA1147H	Women, Migration, and Work
LHA1148H	Introduction to Workplace, Organizational, and Economic Democracy
LHA1149H	Precarity and Dispossession: Urban Poverty and Rebel Cities
LHA1150H	Critical Perspectives on Organizational Change
LHA1152H	Individual Reading and Research in Adult Education: Master's Level
LHA1160H	Introduction to Transformative Learning Studies
LHA1171H	Foundations of Indigenous Education in Canada
LHA1180H	Indigenous Worldviews: Implications for Education
LHA1181H	Embodied Learning and Alternative Approaches to Community Wellness
LHA1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA1183H[+]	Master's Research Seminar (Credit/No Credit)
LHA1184H	Indigenous Knowledge: Implications for Education
LHA1185H	Leadership in Organizations: Changing Perspectives
LHA1186H	Organizational Change in the Nonprofit and Public Sectors
LHA1190H	Community Healing and Peacebuilding
LHA1193H	Adult Education for Sustainability
LHA1194H	Cyberliteracy and Adult Education

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

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
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, 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

- 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:
  - 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:

- 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

10 sessions part-time

Time Limit

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 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 program strands: Policy, Leadership, Change, or Social Diversity. LHA1004H *Research Literacy in Educational Leadership and Policy* is strongly recommended, as is an appropriate research methods (RM) course selected in consultation with the Faculty MRP supervisor.
- **Major Research Paper (MRP)**: LHA2001Y^{0} *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: 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:
  - LHA3003H *Designing Research Proposals in Educational Leadership and Policy* (Credit/No Credit; 0.5 FCE).
  - LHA3004H *Research and Literacy for the EdD Program* (0.5 FCE).
  - LHA3005H *Introduction to Research Methods for the EdD (RM)* (0.5 FCE) **or** another research methods course.
  - LHA3006H *Data Analysis for the Education Doctorate-RM* (0.5 FCE) **or** another research methods course.
  - 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).
  - 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:
  - 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) proposal hearing.**
- **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 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 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 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.

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.

EDP3045H	Educational Policy and Program Evaluation
EDP3145H	Advanced Issues in Educational Policy Analysis and Program Evaluation
JOI3043H	Development and Use of Surveys in Education Research (RM)

JOI3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)
LHA1003H	Designing Master's Research Proposals
LHA1004H	Research Literacy in Educational Leadership and Policy
LHA1012H	Organizational Culture and Decision Making
LHA1016H	School Program Development and Implementation
LHA1018H	Political Skill in the Education Arena
LHA1019H	Diversity and the Ethics of Educational Leadership and Policy
LHA1020H	Teachers and Educational Change
LHA1029H	Special Applications of the Administrative Process
LHA1030H	The Legal Context of Education
LHA1035H	Sociology of Education
LHA1040H	Introduction to Educational Leadership and Policy: Policy, Leadership, Change, and Diversity
LHA1041H	Educational Administration II: Social and Policy Contexts of Schooling
LHA1042H	Educational Leadership and Diversity
LHA1047H	Managing Changes in Classroom Practice
LHA1048H	Educational Leadership and School Improvement
LHA1050H	Themes and Issues in Policy, Leadership, Change, and Social Diversity
LHA1052H	Individual Reading and Research in Educational Leadership and Policy: Master's Level
LHA1060H	School Leadership Seminar 1
LHA1061H	School Leadership Seminar 2
LHA1065H	Educational Equity and Excellence in International Comparison
LHA1066H	Comparative and International Perspectives on Gender and Education Policy and Practice (exclusion: CIE6000H)
LHA2001Y[0]	Major Research Paper
LHA3003H	Designing Research Proposals in Educational Leadership and Policy (Credit/No Credit)
LHA3004H	Research Literacy for the EdD Program
LHA3005H	Introduction to Research Methods for the EdD (RM) (prerequisite: LHA3004H; applies to regular ELP EdD students only)
LHA3006H	Data Analysis for the Education Doctorate-RM (prerequisite: LHA3005H)
LHA3007H	Literature Reviews for the EdD Program (prerequisite: LHA3004H)
LHA3008H	Professional Seminar and Dissertation Workshop in International Educational Leadership and Policy
LHA3030H	Advanced Legal Issues in Education
LHA3040H	People and Power in Organizations
LHA3041H	Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education
LHA3042H	Field Research in Educational Leadership and Policy (RM)
LHA3044H	Internship/Practicum in Educational Leadership and Policy
LHA3047H	Research Seminar on Leadership and Educational Change
LHA3052H	Individual Reading and Research in Educational Leadership and Policy: Doctoral Level
LHA3055H	Democratic Values, Student Engagement, and Democratic Leadership
LHA3064H	Global Governance and Educational Change: the Politics of International Cooperation in Education (Prerequisite: CIE1001H. Exclusion: LHA3180H.)
LHA5000H	Special Topics in Educational Leadership and Policy: Master's Level
LHA6000H	Special Topics in Educational Leadership and Policy: Doctoral Level

[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.

LHA1815H	Economics and Finance of Higher Education (Exclusion: LHA2006H.)

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)**: LHA2001Y^{0} *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.
  - 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.

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.
  - 1.5 FCEs in Student Development and Student Services:
    - LHA1844H *The Student Experience in Postsecondary Education* (0.5 FCE).
    - LHA1854H *Student Development Theory* (0.5 FCE).
    - LHA1856H *Advanced Student Development Theories in Higher Education* (0.5 FCE).
  - 3.0 FCEs including:
    - 0.5 FCE from the Higher Education field.
    - 0.5 FCE in research methods.
  - Depending on an individual student's professional experience, students may be advised to take LHA1853H *Introduction to Student Services* (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: 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.

LHA1802Y	Theory in Higher Education
LHA1803H	Recurring Issues in Postsecondary Education
LHA1804H	Issues in Medical/Health Professional Education
LHA1805H	The College Sector

LHA1806H	Systems of Higher Education
LHA1807H	System-Wide Planning and Policy for Higher Education
LHA1808H	Research in Health Professional Education (RM)
LHA1809H	Administration of Colleges and Universities
LHA1810H	Evaluation of Knowledge, Clinical Competence, and Professional Behaviour in the Health Professions
LHA1811H	Organizational Change in Higher Education
LHA1812H	Education and the Professions
LHA1813H	Issues in Cognitive and Educational Psychology: Implications for Health Professional Education
LHA1814H	Lifelong Learning and Professional and Vocational Education (Exclusion: LHA5807H Special Topics in Higher Education: Master's Level.)
LHA1815H	Economics and Finance of Higher Education (Exclusion: LHA2006H.)
LHA1816H	Sociology of Higher Education (Exclusion: LHA5807H Special Topics in Higher Education: Master's Level.)
LHA1818H	Politics of Higher Education (Exclusion: LHA5806H Special Topics in Higher Education: Master's Level.)
LHA1822H	Teaching and Learning in Higher Education (Exclusion: LHA5809H Special Topics in Higher Education: Master's Level.)
LHA1823H	Scholarship of Teaching and Learning in the Professions (Exclusion: LHA5814H Special Topics in Higher Education: Master's Level.)
LHA1825H	Comparative Education Theory and Methodology (RM)
LHA1826H	Comparative Higher Education
LHA1828H	Evaluation in Higher Education (RM)
LHA1834H	Qualitative Research in Higher Education (RM)
LHA1835H	Logics and Strategies of Case Study Research (RM)
LHA1836H	Critical Analysis of Research in Higher Education (RM)
LHA1837H	Environmental Health, Transformative Higher Education, and Policy Change: Education Toward Social and Ecosystem Healing
LHA1843H	Higher Education and the Law
LHA1844H	The Student Experience in Postsecondary Education
LHA1846H	Internationalization of Higher Education in a Comparative Perspective
LHA1847H	Human Resource and Diversity Issues in Higher Education
LHA1848H	Innovative Curricula in Higher Education and the Professions
LHA1849H	Faculty in Colleges and Universities
LHA1852H	Individual Reading and Research in Higher Education: Master's Level
LHA1853H	Introduction to Student Services
LHA1854H	Student Development Theory
LHA1855H	Capstone in Student Development and Student Services
LHA1856H	Advanced Student Development Theories in Higher Education
LHA1857H	Leadership in Student Affairs and Services
LHA1860H	Capstone Project for Higher Education Leadership Cohort Option (Exclusion: LHA5805H Special Topics in Higher Education: Master's Level.)
LHA3803H	Doctoral Seminar: Recurring Issues in Postsecondary Education
LHA3804H	Doctoral Research Seminar in Higher Education
LHA3810H	International Academic Relations
LHA3852H	Individual Reading and Research in Higher Education: Doctoral Level
LHA5800H	Special Topics in Higher Education: Master's Level
LHA6800H	Special Topics in Higher Education: Doctoral Level

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.

SJE2941H	Bourdieu: Theory of Practice in Social Sciences

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
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Fax: (416) 971-2688

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
Kahnemuyipour, 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
Schertz, 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
Dresher, 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.
- 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

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

Time Limit

3 years

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 fulfil the 3.0 FCE requirement, chosen in consultation with the Graduate Coordinator.
  - 0.5 FCE from JLP2451H, JLP2452H, LIN1070H, LIN1106H, LIN1107H, LIN1112H, 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 fulfil the 3.0 FCE requirement, chosen in consultation with the Graduate Coordinator.
  - 0.5 FCE from JLP2451H, JLP2452H, LIN1070H, LIN1106H, LIN1107H, LIN1112H, LIN1156H, LIN1211H, LIN1255H, LIN1256H, LIN1271H, LIN1272H, LIN1276H.

- 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.

JAL1145H	Field Methods
JAL1155H	Language and Gender
JLP2451H	Language Acquisition
JLP2452H	Language Acquisition and Linguistic Theory
LIN1001H	Introduction to Linguistics: Sound Structure
LIN1002H	Introduction to Linguistics: Sentence Structure and Meaning
LIN1028H	Phonetics
LIN1029H	Sound Patterns in Language
LIN1031H	Morphological Patterns in Language
LIN1032H	Syntactic Patterns
LIN1041H	Introduction to Semantics
LIN1070H	Language Processing
LIN1103H	Introduction to Analysis and Argumentation
LIN1104H	Quantitative Methods in Linguistics (Credit/No Credit)
LIN1105H	Advanced Quantitative Methods in Linguistics (prerequisite: LIN1104H)
LIN1106H	Introduction to Experimental Design
LIN1107H	Computational Methods in Linguistics (exclusions: CSC2501H/485 Computational Linguistics and CSC2511H/401 Natural Language Computing)
LIN1111H	Acoustic Phonetics
LIN1112H	Phonetic Analysis
LIN1121H	Phonological Theory
LIN1131H	Introduction to Syntactic Theory
LIN1133H	Morphology: Morphosyntactic Issues
LIN1145H	Semantics
LIN1146H	Topics in Semantics and Pragmatics (prerequisite: LIN1145H)
LIN1151H	Urban Dialectology
LIN1156H	Language Variation and Change: Theory and Analysis
LIN1162H	Comparative-Historical Linguistics I
LIN1211H	Advanced Phonetics (prerequisite: LIN228H, LIN323H, or permission of the instructor)
LIN1221H	Advanced Phonology I
LIN1222H	Advanced Phonology II
LIN1223H	Advanced Phonology III
LIN1224H	Advanced Phonology IV
LIN1231H	Advanced Syntax I
LIN1232H	Advanced Syntax II
LIN1233H	Advanced Syntax III
LIN1234H	Advanced Syntax IV
LIN1245H	Advanced Semantics I
LIN1246H	Advanced Semantics II
LIN1247H	Advanced Semantics III
LIN1248H	Advanced Semantics IV
LIN1255H	Advanced Language Variation and Change I

LIN1256H	Advanced Language Variation and Change II
LIN1271H	Advanced Psycholinguistics I
LIN1272H	Advanced Psycholinguistics II
LIN1276H	Topics in Speech Perception
LIN1503H	Reading Seminar
LIN1505H	Research Seminar
LIN2100Y	Linguistic Forum
LIN2101H	Junior Forum (Credit/No Credit)
LIN2201H	Generals Paper I
LIN2202H	Generals Paper II

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
  - Fields:
    - 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 (Universita 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

General
Full-Time MBA
Morning/Evening MBA
Executive MBA
Global Executive MBA
Global Executive MBA for Healthcare and the Life Sciences
Master of Finance
Master of Financial Risk Management
Master of Management Analytics
Graduate Diploma in Professional Accounting

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Management, Rotman School: Management MBA Full-Time

Full-Time MBA Program

Program Description

The Full-Time Rotman MBA is an intense program that combines 16 months of academic study with a 4-month opportunity for a paid internship. The program begins with a core curriculum that introduces Rotman's unique problem-solving and creative methodology with the fundamental disciplines of business. Students have the opportunity to customize their MBA experience by choosing to specialize in a particular interest through 14 areas, develop a broader skill set with over 90 elective courses, and accelerate their career through the experiential learning component of the Flexible Internship program. As the practice of management evolves over time, so do the elective courses and areas that Rotman offers in any given year.

Students are required to complete the course *Applied Management: Placement* in conjunction with a work placement which may be done in the Summer, Fall, or Winter sessions. Depending on their academic area of study and career objectives, students will be guided on the best work term option to secure a placement with an employer. Throughout their work placement, students will benefit from enhanced communication with their host employers, tracking of project deliverables, and feedback from faculty supervisors.

Rotman offers three core strategic areas — an innovative curriculum, tailored career services, and the Self-Development Lab — to develop the skills and experiences students need to accelerate in their careers as high-value decision makers and business leaders. Whether their aim is to make a career switch, accelerate their current career, or start their own business, the Rotman MBA enables students to reach 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 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:
  - 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.
- 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:
  - 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.
  - 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*.
  - Complete 6.5 elective FCEs at the 2000 level (equivalent to thirteen 2000-level courses).
  - 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.
  - 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

1	one credit hour
2	two credit hours
3	three credit hours

RSM1165H	Leveraging Diverse Teams (Credit/No Credit)
RSM1201H	Foundations of Strategic Management
RSM1210H	Managerial Economics
RSM1211H	Economic Environment of Business
RSM1215H	Decision Making with Models and Data
RSM1220H	Financial Accounting and Reporting: A Global Perspective
RSM1222H	Managerial Accounting
RSM1231H	Finance I: Global Markets and Valuation
RSM1232H	Finance II: Corporate Finance
RSM1240H	Operations Management
RSM1250H	Managing Customer Value
RSM1260H	Leading People in Organizations
RSM1282H	Statistics for Management

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

RSM1160H	Business Ethics
RSM1380H or RSM1381H	Applied Management: Placement or Applied Management: Independent Study
Ten 2000-level elective courses	

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.

RSM2000H	Multi-disciplinary Special Topics
RSM2002Y	Research Project
RSM2003H	Research Project
RSM2008H	Creative Destruction Lab Intro
RSM2011H	International Strategy
RSM2012H	Entrepreneurship
RSM2013Y	Creative Destruction Lab Advanced (prerequisite: RSM2008H)
RSM2015H	Non-Market Strategy
RSM2016H	Data-Based Strategic Modelling
RSM2017H	Pharmaceutical Strategy
RSM2018H	Strategy in Emerging Markets
RSM2019H	Corporation 360
RSM2020H	Health Sector Strategy and Organizations
RSM2021H	Corporate Strategy
RSM2023H	Strategic Change and Implementation
RSM2030H	Canadian Business History
RSM2040H	Special Topics in Strategy (prerequisite: RSM1201H)
RSM2052H	Management Consulting
RSM2054H	Technology Strategy
RSM2055H	Cooperative Strategy
RSM2056H	Competitive Strategic Analysis
RSM2058H	Communicating Strategy
RSM2059H	Healthcare and Life Sciences Consulting: Field Application Project
RSM2060H	Digital Strategy
RSM2061H	Strategic Networks
RSM2062H	Management Consulting Practicum
RSM2063H	Catastrophic Failure in Organizations
RSM2081H	Social Entrepreneurship
RSM2083H	Special Topics in Strategic Management
RSM2085H	Healthcare Innovation
RSM2087H	Multi-Disciplinary Special Topics
RSM2088H	Designing for Equality
RSM2099H	Special Topics in Strategic Management
RSM2109H	Rotman Study Tour
RSM2113H	Model-Based Decision Making in Practice
RSM2116H	Special Topics in Business Economics
RSM2122H	Clean Energy: Policy Context and Business Opportunities
RSM2123H	International Business in the World Economy
RSM2125H	Game Theory and Applications for Management
RSM2126H	Real Estate Development
RSM2127H	Economic Environment of International Business
RSM2128H	Real Estate Economics
RSM2129H	Forecasting Models and Econometric Methods
RSM2130H	Real Estate Investment
RSM2132H	Business and the City
RSM2203H	Current Issues in Financial Reporting and Disclosure
RSM2204H	Taxation and Decision-Making
RSM2209H	Financial Statement Analysis
RSM2210H	Financial Distress and Insolvency
RSM2211H	Business Law
RSM2212H	Business Analysis and Valuation
RSM2300H	Corporate Financing
RSM2301H	Financial Management
RSM2302H	Security Analysis and Portfolio Management
RSM2303H	Risk Modelling and Financial Trading Strategies
RSM2304H	Financial Institutions and Capital Markets
RSM2305H	International Financial Management
RSM2306H	Options and Futures Markets
RSM2307H	Advanced Derivatives
RSM2308H	Financial Risk Management
RSM2309H	Mergers and Acquisitions

RSM2310H	Analysis and Management of Fixed Income Securities
RSM2312H	Value Investing
RSM2314H	Private Equity and Entrepreneurial Finance
RSM2315H	Management of Private Wealth
RSM2316H	Introduction to Hedge Funds and Broker Dealers
RSM2317H	Special Topics in Finance
RSM2318H	Special Topics in Finance
RSM2319H	The Revolution in Finance: Markets, Institutions, and Organizations
RSM2320H	The Canadian and American Financial Systems — Comparisons and Contrasts
RSM2321H	Special Topics in Finance
RSM2326H	How Banks Work: Management in a New Technological Age
RSM2327H	Islamic Finance in Canada
RSM2328H	Machine Learning and Financial Innovation
RSM2401H	Data and Information Management for Business Analytics
RSM2405H	Supply Chain Management
RSM2406H	Operations Management Strategy
RSM2407H	Services Operations Management
RSM2408H	Modeling and Optimization for Decision Making
RSM2409H	Management Analytics
RSM2410H	Analytics and Operations Consulting
RSM2415H	Special Topics in Management Science
RSM2416H	Special Topics in Operations Management
RSM2417H	Special Topics in Operations Management
RSM2500H	Marketing Strategy
RSM2504H	Consumer Behaviour
RSM2505H	Strategic Marketing Communications
RSM2506H	Marketing Research
RSM2508H	Sales Management
RSM2511H	Fintech Marketing: Innovation in the Marketing of Financial Services
RSM2512H	Branding
RSM2513H	Pricing
RSM2515H	Special Topics in Marketing
RSM2516H	Special Topics in Marketing
RSM2517H	Futures Thinking: Developing Business Insight
RSM2518H	Special Topics in Marketing
RSM2519H	Managing Customer Value 2.0
RSM2520H	Special Topics in Marketing
RSM2521H	Marketing Using Information Technology
RSM2522H	Marketing and Behavioural Economics
RSM2523H	Business Design Fundamentals
RSM2524H	Business Design Practicum
RSM2525H	One to One Marketing
RSM2530H	Special Topics in Marketing
RSM2531H	Special Topics in Marketing
RSM2532H	Special Topics in Marketing
RSM2601H	Organization Design
RSM2603H	Advanced Negotiations and Conflict Management
RSM2604H	Managerial Negotiations
RSM2606H	Designing New Work Organizations
RSM2609H	Aligning People and Strategy
RSM2612H	Managing Talent for Global Operations
RSM2615H	Special Topics in Organizational Behaviour and Human Resource Management
RSM2616H	Special Topics in Organizational Behaviour and Human Resource Management
RSM2618H	The Socially Intelligent Manager
RSM2619H	Power and Influence in Organizations
RSM2620H	Leading Teams
RSM2621H	Effective Leadership
RSM2625H	Business Problem Solving: A Model-Based Approach
RSM2640H	Leading Social Innovation
RSM2700H	Independent Study Project (Honours/Pass/Fail)
RSM2701H	Global Consulting Project (Honours/Pass/Fail)
RSM2702H	OnBoard (Honours/Pass/Fail)
RSM2703H	CityLab (Honours/Pass/Fail)
RSM2705H	C-Suite (Honours/Pass/Fail)
RSM2706H	Special Topics in Finance
RSM2709H	Global Practicum (Honours/Pass/Fail)
RSM2913H	Getting It Done®
RSM2918H	Multidisciplinary Special Topics
RSM2920H	Top Manager’s Perspective

RSM2922H	The Opposable Mind
RSM2923H	Business Problem Solving
JDM3619H	Digital Media Distribution (Credit/No Credit)

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.
- The Extended Full-Time (Morning/Evening) MBA programs start annually in August. Applicants are encouraged to apply as per the deadline dates (beginning in the fall with a final deadline in June). Applicants who meet all of the criteria 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

- 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:

Second-Digit Course Weight

1	one credit hour

2	two credit hours
3	three credit hours

RSM1160H	Business Ethics
RSM1165H	Leveraging Diverse Teams (Credit/No Credit)
RSM1201H	Foundations of Strategic Management
RSM1210H	Managerial Economics
RSM1211H	Economic Environment of Business
RSM1215H	Decision Making with Models and Data
RSM1220H	Financial Accounting and Reporting: A Global Perspective
RSM1222H	Managerial Accounting
RSM1231H	Finance I: Global Markets and Valuation
RSM1232H	Finance II: Corporate Finance
RSM1240H	Operations Management
RSM1250H	Managing Customer Value
RSM1260H	Leading People in Organizations
RSM1282H	Statistics for Management
RSM1365H[0]	Leadership Development Practicum (Credit/No Credit)

[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.

Management, Rotman School: Management Executive MBA

Executive Master of Business Administration

Program Description

The Rotman One-Year Executive MBA provides mid-to-senior working professionals and entrepreneurs who have management experience with the business knowledge and leadership skills they need to take their careers to the next level. The innovative 13-month curriculum, taught by world-class faculty, is focused on developing senior management strategy, decision-making, and leadership skills.

Classes take place every other Friday and Saturday, with four week-long residential modules spread throughout the program so that students maximize the learning experience while minimizing time away from work.

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

RSM5001H	Strategy 1
RSM5011H[0]	Capstone Project
RSM5101H	Economics 1
RSM5102H	Economics 2
RSM5201H	Accounting 1
RSM5301H	Finance 1
RSM5302H	Finance 2
RSM5401H	Business Operations
RSM5501H	Marketing 1
RSM5600H	Personal Leadership
RSM5602H	Negotiations
RSM5603H	The Business Environment: Ethics
RSM5604H[0]	Leadership Development Practicum (Credit/No Credit)
RSM5801H	Quantitative Reasoning for Management

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.

RSM2609H	Aligning People with Strategy
RSM2619H	Power and Influence in Organizations
RSM5002H	Strategy 2
RSM5006H	Corporate Governance
RSM5007H	International Business
RSM5009H	Topics in Strategic Management
RSM5202H	Accounting 2
RSM5291H	Business Problem Solving: A Model-Based Approach
RSM5502H	Marketing 2
RSM5601H	Organizational Leadership
RSM5605H	The Thoughtful Leader
RSM5609H	Special Topics in Organizational Behaviour

[0] 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
www.sdabocconi.it/en/mba-executive-mba/global-executive-mba

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

RSM1360H	Leading People in Organizations
RSM2012H	Entrepreneurship
RSM2023H	Strategic Change and Implementation
RSM2524H	Business Design Practicum
RSM2615H	Special Topics in Organizational Behaviour and Human Resource Management
RSM5001H	Strategy 1
RSM5002H	Strategy 2
RSM5007H	International Business
RSM5008H (0.25 FCE)	Corporate Governance
RSM5101H	Economics 1
RSM5201H	Accounting 1
RSM5202H	Accounting 2
RSM5301H	Finance 1
RSM5302H	Finance 2
RSM5304H	Creating Value Through Acquisitions and Private Equity
RSM5401H	Business Operations
RSM5501H	Marketing 1
RSM5602H	Negotiations
RSM5603H	The Business Environment: Ethics
RSM5604H[0]	Leadership Development Practicum (Credit/No Credit)
RSM5607H (0.25 FCE)	Leveraging Diverse Teams (Honours/Pass/Fail)
RSM5608H (0.25 FCE)	Business Analytics
RSM5801H	Quantitative Reasoning for Management
RSM5901H	Managing Innovation

[0] 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 pharmaceuticals 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.

RSM2020H	Health Sector Strategy and Organizations
RSM2083H	Special Topics in Strategic Management
RSM2522H	Marketing and Behavioural Economics
RSM2524H	Business Design Practicum
RSM5001H	Strategy 1
RSM5007H	International Business
RSM5013H	Digital Health
RSM5014H	Data Analytics and Strategic Decision-Making in Health and Life Sciences
RSM5015H[0]	Capstone Project
RSM5023H[0]	Strategic Change and Implementation
RSM5101H	Economics 1
RSM5108H	Decision-Making with Models and Data
RSM5109H[0]	Rotman Study Tour
RSM5201H	Accounting 1
RSM5301H	Finance 1
RSM5303H	Corporate Finance and Corporate Governance for Healthcare and the Life Sciences
RSM5401H	Business Operations
RSM5501H	Marketing 1
RSM5600H	Personal Leadership
RSM5602H	Negotiations
RSM5603H	The Business Environment: Ethics
RSM5604H[0]	Leadership Development Practicum (Credit/No Credit)
RSM5801H	Quantitative Reasoning for Management

[0] 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: 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):

- 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.

RSM4113H (0.25 FCE)	Macroeconomics for Finance Professionals
RSM4216H	Financial Reporting and Financial Statement Analysis
RSM4220H	Advanced Accounting Topics for Finance
RSM4310H	Foundations of Finance
RSM4314H	Risk Management and Financial Institutions
RSM4315H	Investment Banking and Corporate Valuation
RSM4317H	Analysis of Fixed Income Markets
RSM4318H	Applied Portfolio Management
RSM4319H	Forecasting Risks and Opportunities for Financial Securities
RSM4322H	Applications of Derivatives Products
RSM4323H	Investments
RSM4324H	Innovations in Financial Technology

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

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 and/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

Within this ten-month, full-time program (three sessions), students must complete a structured sequence of 11 half courses (**5.5 full-course equivalents [FCEs]**). 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:

RSM6301H	Topics in Financial Risk
RSM6302H	Financial Markets, Risk, and Institutions
RSM6303H	Regulation of Financial Institutions
RSM6304H	Operational Risk
RSM6305H	Credit Risk
RSM6306H	Probabilistic Modelling for Risk-Informed Decisions
RSM6307H	Macroeconomics for Financial Risk Management Professionals
RSM6308H	Advanced Investments
RSM6310H	Derivative Models for Risk Management
RSM6311H	Rotman Risk Management Project
RSM6313H	Innovations in Financial Technology

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.

The MMA degree program is offered over 11 months using a cohort-based model. Students must complete a structured sequence of 13 half-course equivalents (6.5 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 (a 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 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:

RSM8224H	Analytic Insights Using Accounting and Financial Data
RSM8411H	Structuring and Visualizing Data for Analytics
RSM8413H	Big Data Analytics
RSM8414H	Tools for Probabilistic Models and Prescriptive Analytics
RSM8423H	Optimizing Supply Chain Management and Logistics
RSM8431Y[0]	Analytics Colloquia
RSM8432H[0]	Management Analytics Practicum
RSM8502H	Data-Based Management Decisions
RSM8512H	Modeling Tools for Predictive Analytics
RSM8521H	Leveraging AI and Deep Learning Tools in Marketing
RSM8522H	Analytics for Marketing Strategy
RSM8901H	Analytics in Management

Program Length

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

Time Limit

3 years full-time

[0] Course that may continue over a program. The course is graded when completed.

Management, Rotman School: Professional Accounting GDipPA

Graduate Diploma in Professional Accounting

Program Description

The **Rotman Graduate Diploma in Professional Accounting (GDipPA)** is an excellent way to gain advanced standing in the pursuit of a Chartered Professional Accountant (CPA) certification. This 12-week summer program deepens knowledge of accounting while satisfying four modules of the CPA Professional Education Program (CPA PEP). The program helps prepare students for the Common Final Examination (CFE) and allows them to advance straight to the Capstone 1 module in the CPA PEP.

The program takes advantage of the depth of accounting expertise at the Rotman School as well as its long-standing commitment to professional accounting education.

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:

RSM7201H	Advanced Financial Reporting
RSM7202H	Advanced Taxation
RSM7203H	Advanced Topics in Assurance and Control
RSM7301H	Finance and Professional Practice
RSM7204H	Integration and Analysis

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
Email: Kate.Alexandrova@rotman.utoronto.ca
Telephone: (416) 946-0894

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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, 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
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***)
DeCelles, 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 - BS, MS, 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 - BA, BS, PhD
Hu, Ming - BS, MS, PhD
Hull, John - BA, MA, MA, PhD
Hyatt, Douglas - BA, MA, PhD
Kan, Raymond - BBA, MBA, DPhil
Kang, Sonia - BSc, MA, PhD
Kaplan, Sarah - BA, MA, PhD
Kramer, Lisa - BBA, PhD
Krass, 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
Mahrt-Smith, Jan - BSc, PhD
Malekian, Azarakhsh - 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, Sridhar - 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
Riddiough, 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
Shalev, 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
Toh, Soo Min - BBA, PhD
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White, Alan - BEng, MBA, PhD
Whyte, Glen - LLB, MA, MPH, MBA, PhD
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Zhong, Chenbo - BA, MA, PhD
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Members Emeriti

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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
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Fleck, James - BA, DBA
Gunz, Hugh - DPhil, PhD
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Associate Members

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Zhong, Zachary - PhD
Zoican, Marius - BSc, MPH, 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

RSM3001H	Research Methods in Strategic Management
RSM3002H	Advanced Topics in Strategy and Organization
RSM3003H	Advanced Topics in Strategy and Economics
RSM3005H+	Strategic Management Workshop
RSM3010H	Special Topics in the Economics of Technology and Innovation
RSM3011H	Advanced Topics in the Theory of Industrial Organization
RSM3012H	Advanced Topics in Urban and Real Estate Economics
RSM3013H	Workshop in Economics
RSM3020H	Financial Accounting: Theory and Empirical Research
RSM3021H	Managerial Accounting Research Methods
RSM3022H	Auditing Seminar
RSM3023H	Topics in Accounting Research
RSM3025H+	Workshop in Accounting
RSM3029H	Special Topics in Accounting
RSM3030H	Financial Theory I
RSM3031H	Financial Theory II

RSM3032H	Empirical Methods in Finance
RSM3033H	Current Topics in Finance
RSM3034H	Capital Markets Workshop
RSM3041H	Seminar in Operations Management
RSM3045H	Advanced Topics in Operations Management I
RSM3046H	Advanced Topics in Operations Management II
RSM3049H	Special Topics in Operations Management
RSM3051H	Marketing Theory I: Consumer Behaviour
RSM3052H	Marketing Theory II: Strategy
RSM3053H	Behavioural Research Methods in Marketing
RSM3054H	Current Topics in Consumer Behaviour
RSM3055H	Econometric Methods in Marketing
RSM3056H	Current Topics in Marketing Strategy
RSM3057H	Workshop in Marketing (Credit/No Credit)
RSM3058H	The Psychology of Judgement and Decision Making
RSM3060H	Advances in Human Resource Management
RSM3062H	Methods and Research in Organizational Behaviour
RSM3064H	Advanced Topics in Organizational Behaviour
RSM3065H	Meso Organizational Behaviour
RSM3066H	Quantitative Methods in the Applied Behavioural Sciences (prerequisite: RSM3062H)
RSM3067H	Organizational Behaviour and Human Resources Management Seminar
RSM3069H	Special Topics in Organizational Behaviour and Human Resources Management
RSM3080H	Research Methods in Business
RSM3090H	Reading Course in Approved Field
RSM3091H	Reading Course in Approved Field

[+] *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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Graduate Department of Management
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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, MAcct
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 resumé. 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)
    - MAF4001H *Advanced Seminar in Accounting and Finance I* (Credit/No Credit, 0.0 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 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)
    - MAF4002H *Advanced Seminar in Accounting and Finance II* (Credit/No Credit, 0.0 FCE)
    - MAF5003H *Finance Capstone Course II* (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)
    - MAF3006H *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

MAF1001H	Advanced Topics in Financial Reporting
MAF1002H	Strategy, Governance and Management Accounting
MAF1003H	Advanced Topics in Assurance
MAF1004H	Advanced Taxation
MAF1005H	Current Issues in Accounting and Assurance
MAF2001H	Economics and Quantitative Methods
MAF2002H	Advanced Corporate Finance
MAF2003H	Investment Analysis and Portfolio Management I
MAF2004H	Financial Statement Analysis and Equity Valuation
MAF2005H	Derivatives
MAF2006H	Investment Analysis and Portfolio Management II
MAF2007H	Fixed Income
MAF3001H	Leadership in the 21st Century
MAF3002H	Strategy, Business Development and Sales
MAF3003H	Business Data Analytics
MAF3004H	Integration and Analysis: Board Report
MAF3005H	Integration and Analysis: Critical Thinking and Decision Making I
MAF3006H	Integration and Analysis: Critical Thinking and Decision Making II
MAF4000H	Co-op Internship
MAF4001H	Advanced Seminar in Accounting and Finance I (Credit/No Credit)
MAF4002H	Advanced Seminar in Accounting and Finance II (Credit/No Credit)
MAF5001H	Technical Update in Financial and Management Accounting (Credit/No Credit)
MAF5002H	Finance Capstone Course I (Credit/No Credit)
MAF5003H	Finance Capstone Course II (Credit/No Credit)
MAF5004H	Integrated Case Writing (Credit/No Credit)

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.

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Management & Professional Accounting

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Management of Innovation

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Sustainability Management

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Investigative & Forensic Accounting

Admissions have been administratively suspended. Applicants may be interested in the Master of Forensic Accounting degree program listed above.

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Diploma in Investigative & Forensic Accounting Program
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Management & Innovation: Graduate Faculty

Full Members

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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

Scharper, Stephen - BA, MA, PhD
Smieliauskas, Waldemar - BS, MS, PhD
Toh, Soo Min - BBA, PhD ***(Director)***
Tombak, Mihkel - BS, AM, MBA, PhD
Vinodrai, Tara - BA, MA, PhD
Vyas, Dushyantkumar - PhD
Wensley, Anthony - MA, MA, MBA, PhD
Ye, Minlei - PhD
Zweig, David - BA, MASc, DPhil

Associate Members

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Chen, Ningyuan - BS, MS, PhD
Corrin, Michael - BFA, BA, BSc, MSc
Currie, Mark Allister - BSc, PhD
Derksen, Laura - BSc, MSc, PhD
Gaetani, Ruben - BA, MA, MSc, PhD
Goetz, Daniel Thomas - BA, MA
Innocente, Nathan - BA, MA, MA
Iqbal, Abraham - BCom, MA, CPA
Jones, Duncan - BSc, MBA, MSc
Kirsch, Tanya - BCom
Kitunen, Joan - BBM, CA, CPA
Maddalena, Damian - BS, MS, MA, PhD
Mitsakakis, Nikolaos - BS, MS, MMath, DPH
Parker, Jayson - PhD, PhD
Parkinson, Jack - BA, MA, PhD
Radhakrishnan, Phanikiran - DPhil
Revers, Leigh - PhD
Schneider, Manfred - BCom, JD, MBA, CA, CPA
Schumann, Eckhard - BComm, CA, CPA
Steck, Andrew Lewis - BA, MA, PhD
Trippen, Gerhard - MCS, PhD
Wiecek, Irene - BComm, CA, CPA
Yung, Otto - BASc, BComm, MA, MBA
Zuliani, Elisa - BBM, CA

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.

IMI1001H	Innovation and Entrepreneurship
IMI2001H	Special Topics in Management and Innovation
IMI3001H[+]	Biocommercialization I
IMI3003H	Biocommercialization II (Recommended co-requisite: IMI3001H. Exclusion: IMI3001H if completed before 2020-21.)

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

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.

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.

BTC1600H	Biopartnering I
BTC1610H	Biopartnering II
BTC1700H	Molecular Biology Laboratory
BTC1710H	Biomaterials and Protein Chemistry Theory
BTC1720H	Biomaterials and Protein Chemistry Lab
BTC1800H	Biotechnology in Medicine
BTC1810H	Biotechnology and Drug Manufacturing
BTC1820H	Biotechnology in Agriculture and Natural Products
BTC1900Y[0]	Work Term I (Internship)
BTC1910Y[0]	Work Term II (Internship)
BTC2000H[+]	Effective Management Practices
BTC2010H	Fundamentals of Managerial Concepts
BTC2020H	Society, Organizations, and Technology
BTC2030H	Management of Technological Innovation

[0] 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

BTC1840H	Patent Law for the Life Sciences
BTC1850H	Creating Life Science Products
BTC1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
BTC1920Y	Work Term III (Internship)
BTC2110H	Topics in Biotechnology
BTC2120H	Topics in Biotechnology

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.

BTC1600H	Biopartnering I
BTC1610H	Biopartnering II
BTC1842H	Medical Device Reimbursement
BTC1859H	Data Science in Health I
BTC1877H	Data Science in Health Part II (Prerequisite: BTC1859H.)
BTC1882H	Digital Ethnography in Health
BTC1895H	Introduction to IT Consulting and Web Design

BTC1899H	Digital Health Technology
BTC1900Y[0]	Work Term I (Internship)
BTC1910Y[0]	Work Term II (Internship)
BTC2000H[+]	Effective Management Practices
BTC2010H	Fundamentals of Managerial Concepts
BTC2030H	Management of Technological Innovation
MSC2011H	Special Topics in Biomedical Communications
MSC2019H	Information and Data Visualization in Science and Medicine

[0] 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

BTC1840H	Patent Law for the Life Sciences
BTC1850H	Creating Life Science Products
BTC1860H	Generations of Advanced Medicine: Biologics in Therapy (GAMBiT)
BTC1889H	Deep Learning in Health (Prerequisites: BTC1859H and BTC1877H or 1.5 credits in statistics [undergraduate or graduate]. 1.0 credit of undergraduate/graduate biology or related discipline. Advanced data science coding in the R language.)
BTC1920Y	Work Term III (Internship)
BTC2110H	Topics in Biotechnology
BTC2120H	Topics in Biotechnology

Other graduate courses approved by Program Directors.

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

IFA1900H	Forensic Accounting and Investigation, Fraud and Cybercrime
IFA1905H	Fraud Prevention, Risk Assessment and Investigation, Data Analytics and Security

Year 1: Winter

IFA1906H	Money Laundering, Asset Tracing and Recovery, and International Aspects of Fraud
IFA1901H	Forensic Accounting Professional and Practice Issues

Year 1: Summer

IFA1907H	Legal and Legal Process Issues for Forensic Accountants

Year 2: Fall

IFA2900H	Loss Quantification
IFA2905H	Advanced Forensic Investigation and Psychological Aspects of White Collar Crime

Year 2: Winter

IFA2906H	Business Valuation, Bankruptcy and Insolvency, and Advanced Loss Quantification
IFA2903H	Research Project on Emerging Issues/Advanced Topics

Year 2: Summer

IFA2904H	Integrative Capstone

Program Length

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

Time Limit

6 years part-time

MFAcc Program (Eight-Month Advanced-Standing Option)

Admissions have been administratively suspended.

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
  - 0.5 FCE: IFA2905H involves weekly online and residency sessions, beginning in May*
  - 0.5 FCE: IFA2906H involves weekly online and residency sessions, beginning in June*

*Involves an intensive, mandatory six-day in-residence session, held in August at the University of Toronto Mississauga.

Program Length

2 sessions part-time (typical registration sequence: W/S)

Time Limit

2 years part-time

Management & Innovation: Forensic Accounting MFAcc Courses

Required Courses

Year 1

IFA1900H	Forensic Accounting and Investigation, Fraud and Cybercrime
IFA1901H	Forensic Accounting Professional and Practice Issues
IFA1905H	Fraud Prevention, Risk Assessment and Investigation, Data Analytics and Security
IFA1906H	Money Laundering, Asset Tracing and Recovery, and International Aspects of Fraud
IFA1907H	Legal and Legal Process Issues for Forensic Accountants

Year 2

IFA2900H	Loss Quantification
IFA2903H	Research Project on Emerging Issues/Advanced Topics
IFA2904H	Integrative Capstone
IFA2905H	Advanced Forensic Investigation and Psychological Aspects of White Collar Crime
IFA2906H	Business Valuation, Bankruptcy and Insolvency, and Advanced Loss Quantification

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:
  - 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.

Program Requirements

The program runs for 27 months covering seven sessions of full-time study.

- **Coursework**. Students must successfully complete a total of **18.0 full-course equivalents (FCEs)** in required courses, as listed below.
- **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:

Credit Hours	Notation
0	CR/NCR (Credit/No Credit)
1	one module
2	two modules
3	three modules

One module equals five weeks with three contact hours per week. One module equals 0.25 FCE.

MGT1090H(0)+	Accounting Work-Term Course I
MGT1160H(1)	Communications
MGT1181H(1)	Introduction to Integration and Professional Decision Making
MGT1202H(2)	Ethics and Governance
MGT1210H(2)	Managerial Economics
MGT1211H(2)	Economic Environment of Business
MGT1221H(2)	Financial Accounting I
MGT1222H(2)	Managerial Accounting
MGT1241H(2)	Operations Management
MGT1250H(2)	Marketing
MGT1272H(2)	Management Information Systems
MGT1301H(3)	Fundamentals of Strategic Management
MGT1323H(3)	Auditing and Reporting
MGT1330H(3)	Business Finance
MGT1362H(3)	Managing People in Organizations
MGT1382H(3)	Statistics for Management
MGT2004H(2)	Advanced Concepts in Strategic Management
MGT2014H(2)	The Legal Environment of Professions and Corporations
MGT2090H(0)+	Accounting Work-Term Course II
MGT2200H(1)	Government and Not-for-Profit Accounting, Reporting, and Control
MGT2205H(3)	Advanced Financial Accounting
MGT2206H(3)	Taxation I

MGT2207H(3)	Taxation II
MGT2224H(2)	Computer Auditing
MGT2225H(2)	Advanced Auditing Topics
MGT2250H(3)	Financial Reporting I
MGT2251H(3)	Financial Reporting II
MGT2260H(2)	Management Control
MGT2261H(2)	Advanced Management Accounting
MGT2280H(2)	Accounting Theory and Research
MGT2281H(1)	Mergers, Acquisitions, and Valuations
MGT2282H(1)	Integration and Professional Decision Making Initiatives I
MGT2283H(1)	Integration and Professional Decision Making Initiatives II
MGT2284H(1)	Capstone — Integrative Board Report
MGT2285H(1)	Integration and Professional Decision Making Initiatives III
MGT2286H(1)	Integration and Professional Decision Making Initiatives IV
MGT2301H(2)	Financial Management

Plus the following elective:

MGT2208H(1)	Taxation III

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:

- **Coursework**. Students must successfully complete a total of **14.75 full-course equivalents (FCEs)** in required courses, as follows: MGT1160H, MGT1181H, MGT1202H, MGT1241H, MGT1272H, MGT1301H, MGT1323H, MGT1330H, MGT1362H, MGT2004H, MGT2014H, MGT2200H, MGT2205H, MGT2206H, MGT2207H, MGT2208H, MGT2224H, MGT2225H, MGT2250H, MGT2251H, MGT2260H, MGT2261H, MGT2280H, MGT2281H, MGT2282H, MGT2283H, MGT2284H, MGT2285H, MGT2286H, and MGT2301H.
- **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, MGT1272H, 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, MGT2208H, 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

MMI1010H	Prices and Markets
MMI1020H	Introduction to Big Data Analysis
MMI1030H	Marketing Science
MMI1040H	Accounting
MMI1050H	Negotiations
MMI1060H	Finance
MMI1070H	Economics of Business Strategy
MMI1080H	Management of Technology
MMI1090H	Technology, Strategy, and Policy
MMI1100H	MMI Internship

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/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* and
    - 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* and
    - 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

SSM1010Y	Principles of Sustainability Management
SSM1020H	Decision Making for Sustainability Management
SSM1050H	Ecosystem Science
SSM1060H	Managing Sustainable Organizations

Year 1: Winter

SSM1030H	Environmental Science
SSM1040H	Managerial Economics for Sustainability Management
SSM1070H	Sustainability Law and Policy
SSM1080H	Strategies for Sustainability Management
SSM1120H	Social Dimensions of Sustainability

Year 1: Summer

SSM1110H	Sustainability Management Internship

Year 2: Fall

SSM1100Y or SSM1101Y	Research Paper I or Research Paper II
Plus 1.5 FCE elective	

Year 2: Winter

SSM1090H	Capstone Course — Sustainable Enterprise
SSM1100Y or SSM1101Y	Research Paper I or Research Paper II
Plus 1.0 FCE elective	

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

SSM1010Y	Principles of Sustainability Management
SSM1020H	Decision Making for Sustainability Management
SSM1030H	Environmental Science
SSM1040H	Managerial Economics for Sustainability Management
SSM1050H	Ecosystem Science
SSM1060H	Managing Sustainable Organizations
SSM1070H	Sustainability Law and Policy
SSM1080H	Strategies for Sustainability Management
SSM1090H	Capstone Course — Sustainable Enterprise
SSM1100Y or SSM1101Y	Research Paper I or Research Paper II
SSM1120H	Social Dimensions of Sustainability

Elective Courses

Course selections need to be approved in advance by the Program Director.

Science Electives

EES1117H	Climate Change and Impact Assessment
EES1125H	Contaminated Site Remediation
ENV1002H	Environmental Policy
ENV1704H	Environmental Risk Analysis and Management
SSM2030H	Advanced Sustainability Management
SSM2050H	Special Topics in Sustainability

Management Electives

EES1124H	Environmental Project Management
ENV1707H	Environmental Finance and Sustainable Investing
RSM2918H	Multidisciplinary Special Topics
SSM2010H	Marketing in Sustainability Management
SSM2020H	Sustainability Ethics
SSM2040H	Applied Sustainability Management
SSM2050H	Special Topics in Sustainability

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

Admissions have been administratively suspended.

IFA1900H	Forensic Accounting and Investigation, Fraud, and Cybercrime
IFA1901H	Forensic Accounting Professional and Practice Issues
IFA1902H	Legal Process — Introductory
IFA1903H	Investigative-Related Matters — Introductory
IFA1904H	Loss Quantification — Introductory
IFA2900H	Loss Quantification
IFA2901H	Investigative-Related Matters — Advanced
IFA2902H	Legal Process — Advanced
IFA2903H	Research Project on Emerging Issues/Advanced Topics
IFA2904H	Integrative Capstone

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].

MUI1010H	Introduction to Management of Urban Innovation
MUI1020H	Civic Engagement and Economic Development
MUI1030H	Urban and Regional Economic Development Theory
MUI1040H	Socially Sustainable Cities: Theory, Policy, and Practice
MUI1050H	Urban Politics
MUI1060H	Local and Regional Government: Management and Policymaking
MUI1075H	Digital Cities
MUI1080H	Economic Development Planning
MUI1090H	Technology, Strategy, Policy
MUI1100H	Summer Internship
MUI2095Y	Capstone Course

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.

GGR1610H	Geography of Finance and Financial Crisis
GLA2018H	Innovation and the City
IMI2001H	Special Topics in Management and Innovation
JMG2020H	Big Data
JPG1512H	Place, Politics, and the Urban
JPG1558H	The History and Geography of Cycles and Cycling
JPG1607H	Geography of Competition
MUI2010H	Sectoral Analysis
MUI2020H	Microeconomics of Competitiveness
MUI2030H	Planning for Jobs: Labour Market Transformations and Employment in 21st Century Cities
MUI2040H	Real Estate Development
MUI2050H	The Economics of Cities and Regions: Productivity, Technology, and Jobs
MUI2055H	Cities, Industry, and the Environment
MUI2060H	Comparative Urban Politics
MUI2070H	Planning and Governing the Metropolis
MUI2080H	Intelligent Communities/Smart Cities
MUI2090H	Public Finance in Canadian Cities
PLA1801H	Urban Infrastructure Planning

POL2394H	Innovation and Knowledge Transfer in City Regions
RSM2132H	Business and the City
SSM2010H	Marketing in Sustainability Management
SSM2020H	Sustainability Ethics
SSM2030H	Advanced Sustainability Management
SSM2040H	Applied Sustainability Management

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

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Wallberg Building
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Canada

Materials Science and Engineering: Graduate Faculty

Full Members

Barati Sedeh, Mansoor - BSc, MASc, PhD
Chattopadhyay, Kinnor - BEng, MEng, PhD ***(Associate Chair, Industrial Relations)***
Coyle, Tom - BS, BA, ScD
Erb, Uwe - MSc, PhD
Grynpas, Marc - MSc, PhD
Hatton, Benjamin - BASc, MASc, PhD ***(Associate Chair, Graduate Studies)***
Hibbard, Glenn - BASc, PhD ***(Chair and Graduate Chair)***
Howe, Jane - PhD
Kherani, Nazir - BASc, MASc, PhD
Lian, Keryn - 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, MASc, 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:
  - MSE1000H[0], 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

[0] 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:
  - 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 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:
  - 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 **2.0 full-course equivalents (FCEs)** (four half courses), including the weekly Graduate Research Seminar, and a thesis. The coursework selected normally includes:
  - MSE2000H^0 *Graduate Research Seminar PhD* (0.5 FCE).
  - Three half courses (1.5 FCEs), at least one of which must be chosen from the list of MSE graduate course offerings.
  - 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:
  - 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

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:
  - Three half courses (1.5 FCEs) from the MASc program.
  - MSE2000H[0] *Graduate Research Seminar PhD* (0.5 FCE).
  - 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:
  - 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 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.
  - 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.*

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:
  - MSE2000H[0] *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.*

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 MSE2000H[0].
  - Year 6: Defend the thesis at the Doctoral Final Oral Examination by August 30.

- 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:
  - 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

6 years

Time Limit

8 years

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

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.

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,
MIE506H, 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, 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 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):
  - 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* (e.g., Water Sanitation and Hygiene; Treatment Wetlands; the topic is subject to obtaining approval from the student's graduate unit)
  - CIV1499H *Special Studies in Civil Engineering* (e.g., Fundamentals of Acid Mine Drainage; the topic is subject to obtaining approval from the student's graduate unit).
  - JCC1313H *Environmental Microbiology*
  - JNC2503H *Environmental Pathways*
  - MIE1807H *Principles of Measurements*
  - STA1004H *Introduction to Experimental Design.*

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

APS502H, APS1005H, APS1017H, APS1022H, APS1040H, APS1050H, APS1051H, APS1052H, APS1053H, APS1080H, CHE507H, CHE1108H, CHE1148H, CHE1434H, 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

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.

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

AER1604H,
APS1034H, APS1039H, APS1040H, APS1101H,
BME1480H, 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: 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, MIE517H, MIE1128H, 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.

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

MSE1000H[0]	Graduate Research Seminar MASc
MSE1004H	Extractive Metallurgy
MSE1015H	Mechanical Properties of Solids I
MSE1022H	Special Topics in Materials Science I
MSE1023H	Special Topics in Materials Science II
MSE1024H	Interface and Nanophase Engineering
MSE1026H	Analytical Electron Microscopy
MSE1028H	Advanced Materials Science
MSE1031H	Forensic Engineering
MSE1032H	Polymers and Composites Engineering (exclusion: MSE432H)
MSE1034H	Directed Readings in Materials Science and Engineering I
MSE1035H	Optical and Photonic Materials
MSE1036H	Application of Electrochemical Techniques in Materials Science
MSE1037H	Process Metallurgy of Iron and Steel
MSE1038H	Computational Materials Design
MSE1043H	Composite Materials Engineering (exclusion: MSE432H)
MSE1044H	Directed Readings in Materials Science and Engineering II
MSE1051H	Advanced Physical Properties of Structural Nanomaterials
MSE1058H	Nanotechnology in Alternate Energy Systems
MSE1061H	Engineered Ceramics
MSE1062H	Materials Physics
MSE1063H	Application of Artificial Intelligence in Process Metallurgy (prerequisites: basic knowledge of R and Python; exclusion: MSE1065H)
MSE1064H	Extraction, Production, and Processing of Aluminum
MSE1065H	Application of Artificial Intelligence in Materials Design (prerequisites: basic knowledge of R and Python and materials science; exclusion: MSE1063H)
MSE1066H	Practical Aspects of Electron Microscopy
MSE1067H	Damage and Failure of Advanced Engineering Materials (prerequisites: basic knowledge of materials science, mechanics of materials, and fracture mechanics)
MSE1068H	Additive Manufacturing of Metals, Ceramics, and Composites (prerequisites: basic knowledge of materials science, especially phase transformation and mechanical behaviour of materials)
MSE2000H[0]	Graduate Research Seminar PhD
MSE3000Y	MEng Project
APS1012H	Managing Business Innovation and Transformational Change
APS1043H	Writing Your Own Patent Application
JMB1050H	Biological and Bio-inspired Materials
JMZ1704H	Polymer Process Engineering
JTC1020H	Ceramics
JTC1135H	Applied Surface Chemistry

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

Mathematical Finance

Mathematical Finance: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Mathematical Finance

MMF

Overview

Financial engineering is one of the fastest-growing areas of applied mathematics.

Contact and Address

Web: www.mmf.utoronto.ca
Email: math.finance@utoronto.ca
Telephone: (416) 946-5206

Mathematical Finance Program
University of Toronto
Suite 219, 720 Spadina Avenue
Toronto, Ontario M5S 2T9
Canada

Mathematical Finance: Graduate Faculty

Full Members

Feuerverger, Andrey - BSc, PhD
Jackson, Kenneth - BSc, MSc, PhD
Jaimungal, Sebastian - BSc, MSc, PhD
Kwon, Roy - BA, MS, MSc, PhD
McCurdy, Tom - BA, MA, PhD
Seco, Luis - PhD

Associate Members

Kreinin, Alexander - MSc, PhD
Pilling, Jason - BSc, MMF
Rosen, Dan - BASc, MASc, PhD
Rubisov, Dmitri - ME, PhD
Tuenter, Johan - BSc, MSc, PhD

Mathematical Finance: Mathematical Finance MMF

Master of Mathematical Finance

Program Description

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

MMF1900Y	Internship (Credit/No Credit)
MMF1910H	Introduction to Financial Industry (Credit/ No Credit)
MMF1914H	Information Technology (Credit/No Credit)
MMF1915H	Introduction of Financial Products (Credit/ No Credit)
MMF1920H	Investment and Finance
MMF1921H	Operations Research
MMF1922H	Data Science Methods for Investment, Finance, and Risk Management
MMF1923H	Financial Markets and Corporate Policy
MMF1926H	Workshop in Mathematical Finance
MMF1927H	Workshop in Mathematical Finance
MMF1928H	Pricing Theory 1
MMF1929H	Asset Management
MMF1941H	Stochastic Analysis
MMF1943Y[0]	Communication
MMF2000H	Risk Management
MMF2012H	Financial Modelling
MMF2021H	Numerical Methods for Finance
MMF2025H	Risk Management Laboratory
MMF2028H	Blockchain Fundamentals for Finance
MMF2030H	Machine Learning for Finance
MMF2032H	Innovation and Entrepreneurship

[0] Course that may continue over a program. The course is graded when completed.

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

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)***
Colliander, 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
Gualtieri, 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
Kapovitch, 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, Dmitriy - 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, Jacov - 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, Ilijas - 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:
  - 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.
- 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:
  - 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.
- 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

MAT1000H	Real Analysis I
MAT1001H	Real Analysis II
MAT1002H	Complex Analysis
MAT1060H	Partial Differential Equations I
MAT1061H	Partial Differential Equations II
MAT1100H	Algebra I
MAT1101H	Algebra II
MAT1300H	Topology I
MAT1301H	Topology II
MAT1600H	Mathematical Probability I
MAT1601H	Mathematical Probability II
MAT1850H	Linear Algebra and Optimization

- **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

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

MAT1000H	Real Analysis I
MAT1001H	Real Analysis II
MAT1002H	Complex Analysis
MAT1060H	Partial Differential Equations I
MAT1061H	Partial Differential Equations II
MAT1100H	Algebra I
MAT1101H	Algebra II
MAT1300H	Topology I
MAT1301H	Topology II
MAT1600H	Mathematical Probability I
MAT1601H	Mathematical Probability II
MAT1850H	Linear Algebra and Optimization

- 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.

MAT1000H	Real Analysis I
MAT1001H	Real Analysis II
MAT1002H	Complex Analysis
MAT1004H	Theory of Approximation
MAT1005H	Fourier Analysis
MAT1006H	Topics in Real Analysis
MAT1007H	Topics in Complex Variables
MAT1008H	Functions of a Complex Variable
MAT1010H	Functional Analysis
MAT1011H	Introduction to Linear Operators
MAT1012H	Real Analysis II
MAT1013H	Theory of Several Complex Variables II
MAT1015H	Topics in Operator Theory
MAT1016Y	Topics in Operator Algebras
MAT1017H	Introduction to K-theory for Operator Algebras
MAT1034H	Topics in Harmonic Analysis
MAT1037H	Von Neumann Algebras
MAT1045H	Topics in Ergodic Theory
MAT1051H	Introduction to Ordinary Differential Equations
MAT1052H	Topics in Ordinary Differential Equations
MAT1060H	Partial Differential Equations I
MAT1061H	Partial Differential Equations II
MAT1062H	Topics in Partial Differential Equations I
MAT1100H	Algebra I
MAT1101H	Algebra II
MAT1103H	Topics in Algebra I
MAT1104H	Topics in Algebra II
MAT1105H	Topics in Representation Theory
MAT1109H	Classical Groups
MAT1110H	Algebraic Groups
MAT1120H	Lie Groups and Lie Algebras I
MAT1122H	Lie Groups and Representations I
MAT1126H	Lie Groups and Fluid Dynamics
MAT1128H	Topics in Probability
MAT1155H	Commutative Algebra
MAT1190H	Algebraic Geometry
MAT1191H	Topics in Algebraic Geometry
MAT1192H	Advanced Topics in Algebraic Geometry
MAT1196H	Representation Theory
MAT1197H	Automorphic Forms and Representation Theory I
MAT1198H	Automorphic Forms and Representation Theory II
MAT1199H	Automorphic Forms
MAT1200H	Algebraic Number Theory
MAT1202H	Analytic Number Theory
MAT1203H	Computational Aspects of Number Theory
MAT1210H	Topics in Number Theory
MAT1300H	Differential Topology
MAT1301H	Algebraic Topology
MAT1302H	Combinatorial Methods
MAT1303H	Combinatorial Designs
MAT1304H	Topics in Combinatorics
MAT1305H	Topics in Geometric Topology
MAT1306H	The Discrete Mathematics Toolkit
MAT1309H	Geometrical Inequalities
MAT1312H	Topics in Geometry
MAT1313Y	Seminar in Geometry
MAT1314H	Introduction to Noncommutative Geometry
MAT1318H	Seminar in Geometry and Topology

MAT1340H	Differential Topology
MAT1341H	Topics in Differential Geometry
MAT1342H	Introduction to Differential Geometry
MAT1343H	Riemannian Manifolds
MAT1344H	Symplectic Geometry
MAT1346H	Homotopy Theory
MAT1347H	Topics in Symplectic Geometry and Topology
MAT1351H	Topics in Homotopy Theory
MAT1355H	Singularity Theory
MAT1359H	Moduli Spaces of Flat Connections
MAT1360H	Complex Manifolds
MAT1392H	Algebra Seminar
MAT1399H	Advanced Point Set Topology
MAT1403H	Model Theory
MAT1404H	Introduction to Model Theory and Set Theory
MAT1430H	Set Theory
MAT1435H	Topics in Set Theory
MAT1436H	Large Cardinals, Structure Theory of Ideals, and Applications (prerequisites: MAT309H or MAT409H)
MAT1449H	Seminar in Foundations
MAT1498H	Communicating Mathematics to a General Audience (Credit/No Credit)
MAT1499H	Teaching Large Mathematics Courses (Credit/No Credit)

Applied Mathematics

MAT1500Y	Applied Analysis
MAT1502H	Topics in Geometric Analysis
MAT1507H	Asymptotic and Perturbation Methods
MAT1508H	Techniques of Applied Mathematics
MAT1509H	Mathematical and Computational Linguistics
MAT1520H	Wave Propagation
MAT1525H	Topics in Inverse Problems and Image Analysis
MAT1525Y	Inverse Problems of X-Ray and Radar Imaging
MAT1600H	Mathematical Probability I
MAT1601H	Mathematical Probability II
MAT1638H	Fluid Mechanics
MAT1639Y	Topics in Fluid Mechanics
MAT1700H	General Relativity
MAT1710H	Group Theory and Quantum Mechanics
MAT1722H	C* Algebras and Quantum Mechanics
MAT1723H	Foundations of Quantum Mechanics
MAT1724H	Functional Analysis in Quantum Mechanics
MAT1725Y	Scattering Theory
MAT1739H	Topics in Mathematical Physics
MAT1750H	Computational Mathematics
MAT1751H	Quantum Computing, Foundations to Frontier
MAT1760H	Computer Algebra
MAT1761H	Algorithms in Algebraic Geometry
MAT1800H	Methods of Applied Mathematics I
MAT1801H	Methods of Applied Mathematics II
MAT1839H	Integral Equation Methods for the Numerical Solution of PDEs
MAT1840H	Control Theory
MAT1841H	Mathematics of Massive Data Analysis: Fundamentals and Applications
MAT1845H	Dynamical Systems
MAT1847H	Holomorphic Dynamics
MAT1850H	Linear Algebra and Optimization
MAT1855H	Mathematical Problems in Economics
MAT1856H	Mathematical Finance
MAT1880H	Case Studies in Applied Mathematics

Individual Reading Courses

MAT1900Y	Readings in Pure Mathematics
MAT1901H	Readings in Pure Mathematics
MAT1902H	Readings in Pure Mathematics
MAT1950Y	Readings in Applied Mathematics
MAT1951H	Readings in Applied Mathematics
MAT2001H	Readings in Theoretical Mathematics I
MAT2002H	Readings in Theoretical Mathematics II

Seminars

MAT3001H	Seminar in Pure Mathematics (Credit/No Credit)
MAT3002H	Seminar in Applied Mathematics (Credit/No Credit)

Research Project

MAT4000Y+	Supervised Research Project

+ *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

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

- 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/
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, MASc, PhD, PhD
Ben Mrad, Ridha - BSc, PhD
Benhabib, Bensiyon - BSc, MSc, PhD
Bilton, Amy Marlou - BASc, MS, PhD
Bussmann, Markus - BASc, MASc, 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
Filleter, Tobin - BE, PhD, PhD
Fox, Mark - BSc, PhD

Gruninger, Michael - BSc, MS, PhD
Guenther, Axel - DipIng, DE
Jamieson, Greg - BS, MASc, PhD
Kesler, Olivera - BSE, SM, ScD
Khalil, Elias - BCS, MCS, PhD
Kwon, Roy - BA, MS, MSc, PhD
Lee, Chi-Guhn - DPhil ***(Coordinator of Graduate Studies)***
Lee, Patrick Chang Dong - MSc, PhD
Liu, Xinyu - PhD
Mandelis, Andreas - BSc, MA, MSc, PhD
McCahan, Susan - BS, PhD
Meguid, Shaker - BSc, MSc, PhD
Mills, James - BSc, MASc, PhD
Mostaghimi, Javad - PhD
Naguib, Hani - BSc, ME, PhD, PEng
Nejat, Goldie - BASc, PhD
Olechowski, Alison - BS, MS, MS, PhD, PhD
Park, Chul - PhD
Sanner, Scott - BCS, BCS, PhD
Shu, L.H. - PhD
Simmons, Craig - BSc, MSc, PhD
Sinclair, Anthony - BSc, MSc, PhD
Sinton, David - BASc, MEng, PhD
Steinman, David - BASc, MASc, PhD
Sullivan, Pierre - BS, MS, PhD
Sun, Yu - BS, MS, MS, PhD
Thomson, Murray - BSc, PhD
Vicente, Joaquim Jose - BSc, MS, PhD
Windisch, Marianne Touchie - BASc, PhD
You, Lidan - BS, MS, PhD
Young, Edmond - BASc, MASc, PhD

Members Emeriti

Currie, Iain - BSc, MASc, PhD
Goldenberg, Andrei - BSc, MSc, PhD
Hooper, Frank - DIC, BASc
James, David - BSc, MS, MA, PhD
Jardine, Andrew - BSc, MSc, PhD
Keffer, James - BASc, MASc, PhD
Makis, Viliam - MSc, PhD
Neumann, A Wilhelm - BA, DrRerNat
Paradi, Joseph - BSc, PhD
Posner, Morton - BASc, PhD
Rogers, John - BSc, MS, PhD
Turksen, Ismail - BSc, MSc, PhD
Venter, Ronald - BSc, MEng, PhD
Wallace, James - BA, BME, MEng, PhD
Ward, Charles - BS, PhD

Associate Members

Cevik, Mucahit - DE
Colic, Sinisa - BASc, MASc, PhD
Frances, Daniel - BASc, MASc, PhD, PEng
Goodfellow, Sebastian - MASc, PhD
Hatton, Benjamin - BASc, MASc, PhD
Hollands, Justin - PhD
Khalvati, Farzad - MASc, PhD
Mackay, Matthew - BASc, PhD
Marzi, Elham - BA, BIS, MIR, PhD
Romkey, Lisa - BSc
Sarhangian, Vahid - BASc, MASc, PhD
Singh, Chandra Veer - BASc, MTech, PhD

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

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 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 expected to complete the requirements in six sessions (two years) and are limited to seven half courses per year and three half courses per session.
- 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

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 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**.
- 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 (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.

Program Length

6 years

Time Limit

8 years

MIE: Mechanical and Industrial 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

AER521H, AER 1415H,
CHE575H, CHE1134H, CHE1475H,
MIE506H, 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 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

APS502H, APS1005H, APS1017H, APS1022H, APS1040H, APS1050H, APS1051H, APS1052H, APS1080H, CHE507H, CHE1108H, CHE1147H, CHE1148H, CHE1434H, CIV1504H, CIV1506H, CIV1507H, CIV1532H, CIV1538H, ECE537H, ECE1504H (exclusions: CSC411H, CSC2515H, ECE421H, ECE521H, ECE1513H), ECE1505H, ECE1510H, ECE1657H, ECE1778H, ECE1779H, MIE562H, MIE1413H, MIE1501H, MIE1512H, MIE1513H, MIE1517H, MIE1620H, MIE1621H, MIE1622H, MIE1623H, MIE1628H, MIE1653H, MIE1721H, MIE1723H, MIE1727H.

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 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

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.

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

AER1604H,
APS1034H, APS1039H, APS1040H, APS1101H,
BME1480H, 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: 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.

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: 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, MIE517H, MIE1128H, 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.

MIE: Mechanical and Industrial Engineering MASc, MEng, PhD Courses

See the departmental website for a schedule of available courses.

Fluid Mechanics

MIE520H	Biotransport Phenomena
MIE1201H	Advanced Fluid Mechanics I
MIE1206H	Non Newtonian Fluid Mechanics
MIE1207H	Structure of Turbulent Flows
MIE1208H	Microfluidic Biosensors (prerequisite: undergraduate-level fluidic mechanics)
MIE1210H	Computational Fluid Mechanics and Heat Transfer
MIE1212H	Convective Heat Transfer
MIE1214H	Applied Computational Fluid Dynamics (CFD)
MIE1222H	Multiphase Flows
MIE1224H	Heating, Ventilating, and Air Conditioning (HVAC)
MIE1232H	Microfluidics and Laboratory-on-a-Chip Systems
MIE1240H	Wind Power
MIE1241H	Energy Management
MIE1299H	Special Topics in Fluid Mechanics

Human Factors and Ergonomics

MIE542H	Human Factors Integration
MIE1401H	Human Factors Engineering
MIE1402H	Experimental Methods in Human Factors Research
MIE1403H	Analytical Methods in Human Factors Research
MIE1411H	Design of Work Places
MIE1412H	Human-Automation Interaction
MIE1413H	Statistical Models in Empirical Research
MIE1414H	Human Factors in Transportation
MIE1415H	Analysis and Design of Cognitive Work
MIE1444H	Engineering for Psychologists

Information Engineering

JMG2020H	Big Data
MIE1501H	Knowledge Modelling and Management
MIE1505H	Enterprise Modelling
MIE1510H	Formal Techniques in Ontology Engineering
MIE1512H	Data Analytics
MIE1513H	Decision Support Systems
MIE1514H	Systems Design and Engineering: A Product Perspective
MIE1516H	Structured Learning and Inference
MIE1517H	Introduction to Deep Learning (prerequisite: APS1070H or equivalent)

Mechanics and Materials

MIE517H	Fuel Cell System
MIE540H	Product Design
MIE1128H	Materials for Clean Energy Technologies
MIE1301H	Solid Mechanics
MIE1303H	Fracture Mechanics
MIE1359H	Engineering Cell Biology and Micro-Nanoengineered Platforms
MIE1705H	Thermoplastics Polymer Processing
MIE1706H	Manufacturing of Cellular and Microcellular Polymers
MIE1707H	Structure-Property Relationships of Thermoplastic and Composite Foams
MIE1708H	Collision Reconstruction
MIE1713H	Analysis and Design of Joints in Manufactured Products
MIE1715H	Life Cycle Engineering
MIE1720H	Creativity in Conceptual Design
MIE1724H	Additive Manufacturing in Engineering Applications

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

MIE561H	Healthcare Systems
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

Thermal Sciences

MIE515H	Alternative Energy Systems
MIE516H	Combustion and Fuels
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

MIE1130H	Nuclear Engineering II: Thermal and Mechanical Design of Nuclear Power Reactors
MIE1132H	Heat Exchanger Design
MIE1133H	Laser Applications in Engineering
MIE1801H	Advanced Engineering Analysis

APS Engineering Courses

APS1005H	Operations Research for Engineering Management
APS1012H	Managing Business Innovation and Transformational Change
APS1013H	Applying Innovation in Engineering and Business Operations
APS1015H	Social Entrepreneurship
APS1016H	Financial Management for Engineers
APS1017H	Supply Chain Management and Logistics
APS1022H	Financial Engineering 2
APS1023H	New Product Innovation
APS1028H	Operations and Production Management for Manufacturing and Services
APS1032H	Introduction to Energy Project Management
APS1034H	Making Sense of Accidents
APS1043H	Writing Your Own Patent Application
APS1049H	Management Consulting for Engineers
APS1050H	Blockchain Technologies and Cryptocurrencies
APS1051H	Portfolio Management Praxis Under Real Market Constraint
APS1052H	Artificial Intelligence in Finance: From Neural Networks to Deep Learning
APS1061H	Business Strategy and Intrapreneurship
APS1070H	Foundations of Data Analytics and Machine Learning
APS1101H	System Dynamic Risk Assessment (recommended prerequisite: APS1034H)
APS1801H	Multidisciplinary MEng Project
APS1802Y	Multidisciplinary MEng Project
APS1803Y	Multidisciplinary MEng Project
APS2000Y	Summer Engineering Practicum (Credit/No Credit)
TEP1203H	Teaching Engineering in Higher Education
TEP1204H	Instructional Design in Engineering Education

SCFI MEng Courses

MIE1750H	Innovation Management I
MIE1751H	Innovation Management II
MIE1752H	Innovation Finance and Economics
MIE1753H	Legal Framework for Innovation
MIE1754H	Laser Applications in Manufacturing
MIE1755H	CAE Technologies in Automotive Engineering
MIE1757H	Electric Motor Technologies in Automotive Engineering
MIE1758H	Polymers and Composites in Automotive Design and Manufacturing
MIE1759H	Polymers and Composites Processing in Automotive
MIE1760H	Metals in Automotive Design and Manufacturing
MIE1761H	Metal Forming Simulation
MIE1762H	Centrifugal and Positive Displacement Pumps I
MIE1763H	Hot Stamping 1. — Metallurgy, Materials, Thermomechanical Treatment, and Welding
MIE1764H	Hot Stamping 2. — Process and Product Performance Simulation and Optimization
MIE1765H	Aluminum Die Casting 1. — Metallurgy, Process Design, and Optimization

Reading Courses

MIE2002H	Readings in Industrial Engineering I (Credit/ No Credit)
MIE2003H	Readings in Industrial Engineering II (Credit/No Credit)
MIE2004H	Readings in Mechanical Engineering I (Credit/No Credit)
MIE2005H	Readings in Mechanical Engineering II (Credit/No Credit)

Seminar Courses

SRM3333Y	MIE Seminar Series for MASc Students
SRD4444Y	MIE Seminar Series for PhD Students

Project

MIE8888Y	MEng Research Project

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 Glen - MD, PhD
Burns, Peter - BSc, PhD
Chakrabartty, 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, Kullervo - BSc, MS, PhD
Ikura, Mitsuhiko - 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
Kislinger, Thomas - PhD ***(Chair and Graduate Chair)***
Koritzinsky, Marianne
Lau, Angus - PhD
Leong, Hon - MSc, PhD
Lerch, Jason - BA, PhD
Lilge, 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
MacIntosh, 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 - DipIng, 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

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

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
Kridel, 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.

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:
  - MBP1015Y[0] *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

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.

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.

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 may be admitted following completion of an MSc degree program in biological, physical, chemical, or medical sciences from a recognized Canadian university or equivalent.
- Admission to the PhD program is highly selective and attainment of minimum admission requirements does not guarantee acceptance.

Program Requirements

- All students, regardless of entry option, complete the same program requirements.
- Considering the broad range of topics available for thesis research and the different backgrounds of students admitted, each student, in consultation with their supervisor, will plan a program of study that provides the appropriate background for the area of investigation.
- All PhD students will participate in MBP1015Y[0] *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.
- Except by special arrangement, students are required to 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:
  - MBP1015Y[0] *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 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

[0] 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 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 MBP1015Y[0] *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:
    - MBP1015Y[0] *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.
- Successful completion of a **Doctoral Final Oral Examination** of the student's research thesis.

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 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:
    - MBP1015Y[0] *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 Ethic*s (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

[0] 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.

MBP1015Y[0] (1.0 FCE)	Biophysics Seminar
MBP1200H (0.25 FCE)	Scientific Exposition and Ethics
MBP1201H (0.25 FCE)	Biostatistics
MBP1300H (0.25 FCE)	Quantitative Cancer Genomics
MBP1301H (0.5 FCE)	Radiation Oncology: Clinical and Experimental Radiobiology
MBP1302H (0.25 FCE)	Structural Biology and Proteomics
MBP1303H (0.25 FCE)	Cell Signaling and Metabolism
MBP1304H (0.25 FCE)	Predictive Oncology and Therapeutics
MBP1305H (0.25 FCE)	Experimental Models for Cancer Research
MBP1306H (0.25 FCE)	Cancer Epigenetics
MBP1307H (0.25 FCE)	Development, Stem Cells, and Cancer
MBP1308H (0.25 FCE)	Radiation Biology and DNA Repair
MBP1309H (0.25 FCE)	Clinical Imaging for Physical Scientists
MBP1310H (0.25 FCE)	Cancer Immunotherapy
MBP1311H (0.25 FCE)	Tumour Microenvironment
MBP1400H (0.25 FCE)	Advanced Magnetic Resonance Imaging
MBP1401H (0.25 FCE)	Advanced Ultrasound
MBP1402H (0.25 FCE)	Biological Imaging
MBP1403H (0.25 FCE)	Biophysics of Focused Ultrasound, Thermal Biophysics
MBP1404H (0.25 FCE)	Cell and Molecular Biology for Physicists – Introduction
MBP1405H (0.25 FCE)	Introduction to Bio-Microscopies
MBP1406H (0.25 FCE)	Introduction to Biophotonics
MBP1407H (0.25 FCE)	Magnetic Resonance Imaging – Overview
MBP1408H (0.25 FCE)	Medical Device Commercialization Essentials
MBP1409H (0.25 FCE)	Medical Device Innovation and Entrepreneurship
MBP1410H (0.25 FCE)	Nanotechnology for Medicine
MBP1411H (0.25 FCE)	Overview of Medical Imaging
MBP1412H (0.25 FCE)	Ultrasound – Overview
MBP1413H (0.25 FCE)	Advanced Biostatistics
MBP1414H (0.25 FCE)	Reading Special Topics

[0] 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.

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Medical Science Program

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Graduate Diploma in Health Research

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Medical Science: Graduate Faculty

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Alibhai, Shabbir - MD
Allard, Johane - MD
Anagnostou, Evdokia - MD
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Bagby, Michael - BA, MA, PhD
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Baker, Andrew - MHSc, MD
Barr, Cathy - BSc, PhD
Bassett, Anne - BSc, MD
Batt, Jane - MD, PhD
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Black, Sandra - BSc, MD
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Brill, Julie - PhD
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Chapman, Kenneth - MSc, MD
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Cherney, David - MD, PhD
Chertkow, Howard - MD
Cheung, Angela - BA, MD, PhD
Connelly, Kim - MBBS, PhD
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Das, Sunit - DrMed
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de Veber, Gabrielle - MD
Dlamini, Nomazulu - MBBS
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Drucker, Daniel - MD
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Esplen, Mary Jane - BScN, MSN, PhD, RN
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Fehlings, Michael - LMCC, MD, PhD
Feinstein, Anthony - MBChB, PhD
Feld, Jordan - MPH, MD
Feldman, Brian - MD
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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
Gerretsen, Philip - MSW, MD, PhD
Gershon, Andrea - MSc, MD
Gilbert, Richard - MBBS, PhD
Ginsburg, Shiphra - MEd, MD
Gladdy, Rebecca - DrMed, PhD
Gladman, Dafna - MD
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Hamilton, Jill - BSc, MSc, MD
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Heon, Elise - LMCC, MD
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Hill, Sean - BA, PhD
Hodaie, Mojgan - BSc, MSc, MD
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Ibrahim, George - BS, MD, PhD
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Kaplan, Allan - AA, BA, MSc, MD
Kapus, Andras - MD, PhD
Kassner, Andrea - MSc, PhD
Kaul, Rupert - MD, PhD
Keating, Armand - BSc, MD
Kennedy, James - MD
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Keshavjee, Shaf - BA, MSc, LMCC, MD
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Koritzinsky, Marianne

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McNamara, Patrick - MB
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Miller, Steven - MD
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Moody, Alan - BA, MA, MBBS
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Members Emeriti

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Lim, Andrew - BSc, MD
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Mah, Linda - MHSc, MD
Mahmud, Farid - MD
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Moraes, Theo - MD
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Wong, Jean - MD
Wu, Robert - MSc, MD
Yeung, Jonathan - BS, MD, PhD
Yunusova, Yana - MS, MA, PhD
Zinman, Lorne - MSc, MD
Zwingerman, Rhonda - BSc, MSc, MD

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 1, complete 5.0 FCEs: MSC1001Y, MSC2001Y, MSC2003Y, MSC2004H, MSC2009H, MSC2020H, and MSC2023H
  - in Year 2, complete 1.5 FCEs: MSC2002H, MSC2012H, and MSC2018H+
  - complete at least 1.0 FCE chosen from MSC2006H, MSC2008H, MSC2015H, and 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.*

Field: Biomedical Visualization 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.
- 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 1, students must complete 5.0 FCEs: MSC1001Y, MSC2001Y, MSC2003Y, MSC2004H, MSC2009H, MSC2020H, and MSC2023H
  - 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)

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

MSC1001Y	Human Anatomy
MSC2001Y	Visual Representation of Medical Knowledge
MSC2002H	Sequential Medical Communication
MSC2003Y	Biomedical Communications Technologies
MSC2004H	Research Methods
MSC2009H	Ethics and Professionalism in Biomedical Communications
MSC2012H	Neuroanatomy for Visual Communication
MSC2018H[+]	Visual Representation of Processes in Human Pathology
MSC2020H	Visual Representation of Biomolecular Structure and Function
MSC2023H	Information Visualization (prerequisite: MSC1001Y; exclusion: MSC2019H)
MSC2025Y	Master's Research Project for BMC

[+] *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.

MSC2005H	Evolution of Medical Illustration
MSC2006H	Advanced Media Design Technologies
MSC2007H	Visual Synthesis of Medical/Scientific Process
MSC2008H	Community-Centred Design Research
MSC2011H	Special Topics in Biomedical Communications
MSC2013Y	Master's Research Project and Paper

MSC2014H	Fundamentals of Scripting for Health Science Communication
MSC2015H	Interpretive Visualization: Cinematic Design and Preproduction
MSC2016H	Visualization Methods
MSC2017H	Visualization Technology
MSC2022H	Graphic Medicine Seminar

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.

Program Requirements

- **Coursework.** Students must complete a minimum of **2.0 graduate full-course equivalent (FCEs)** as follows:
  - 0.5 FCE: MSC1010H[0] *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.

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).

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.
  - Certificate of Proficiency in English (COPE): minimum total score of 86 with minimum writing score of 32, reading score of 22, and listening score of 22. Test of Oral Proficiency assessment band = 7.
- 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: MSC1011H[0] *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.
  - Students may be required to take extra courses in addition to the degree requirements.
- 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

[0] 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: MSC1010H[0] *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: MSC1011H[0] *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.
  - Certificate of Proficiency in English (COPE): minimum total score of 86 with minimum writing score of 32, reading score of 22, and listening score of 22. Test of Oral Proficiency assessment band = 7.
- 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: MSC1011H[0] *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.

JCR1000Y	An Interdisciplinary Approach to Global Challenges
JCV1060H	Developmental Cardiovascular Physiology
JCV3060H	Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction
JCV3061H	Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System
JCV3062H	Advanced Topics in Cardiovascular Sciences — Heart Function
JCV3063H	Advanced Topics in Cardiovascular Sciences — Vascular
JCV3065H	Advanced Topics in Cardiovascular Sciences — Systems Biology
JDB1024Y	Topics in Developmental Biology (MSc)
JDB1025H	Developmental Biology (PhD)
JDB1026Y	Student Seminars in Developmental Biology (PhD)
JNP1014Y	Interdisciplinary Toxicology
JNP1016H	Graduate Seminar in Toxicology
JNP1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR1444Y	Fundamentals of Neuroscience — Cellular and Molecular
JNS1000Y	Fundamentals of Neuroscience — Systems and Behaviour

JPM1005Y	Behavioural Pharmacology
JTB2010H	Proteomics and Functional Genomics
JTB2020H	Applied Bioinformatics
MSC1001Y	Human Anatomy
MSC1004H	Health and Pharmaceuticals (exclusion: HST440H)
MSC1006H	Neuroanatomy
MSC1008H	Advanced Human Embryology and Teratology
MSC1010H[0]	MSc Student Seminars in Translational Research (Credit/No Credit)
MSC1011H[0]	PhD Student Seminars in Translational Research (Credit/No Credit)
MSC1040H	Physiologic Basis of Disease
MSC1081H	Studies in Schizophrenia
MSC1085H	Molecular Approaches to Mental Health and Addictions
MSC1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC1088H	Brain Positron Emission Tomography
MSC1089H	The Biopsychosocial Basis of Mental Health and Addictive Disorders
MSC1090H	Introduction to Computational Biostatistics with R
MSC1100H (0.25 FCE)	Success in Graduate School: a Professional Development Module for MSc Students (Credit/No Credit)
MSC1101H (0.25 FCE)	Success After Graduate School: a Professional Development Module for PhD Students (Credit/No Credit)
MSC1102H (0.25 FCE)	Psychiatric Implications of Traumatic Brain Injury (Credit/No Credit)
MSC1103H (0.25 FCE)	Knowledge Translation (Credit/No Credit)
MSC1104H (0.25 FCE)	Neurodegenerative Disease (Credit/No Credit)
MSC1105H (0.25 FCE)	Clinical Trials (Credit/No Credit)
MSC1106H (0.25 FCE)	GREAT Network Epidemiology, Biostatistics, and Surveillance Practicum (Credit/No Credit)
MSC1107H (0.25 FCE)	Biostatistics in a Nut Shell (Credit/No Credit)
MSC1108H (0.25 FCE)	Animal Models of Human Diseases (Credit/No Credit)
MSC1109H (0.25 FCE)	Introduction to Neuroimaging (Credit/No Credit)
MSC1110H[0] (0.25 FCE)	Strategic Training in Transdisciplinary Radiation Science for 21st C (Credit/No Credit)
MSC1111H (0.25 FCE)	Strategies for Systematic, Scoping, or Other Comprehensive Searches of Literature (Credit/No Credit)
MSC1113H (0.25 FCE)	Radiomics and Machine Learning for Medical Imaging (Credit/No Credit)
MSC2003Y	Biomedical Communications Technologies
MSC2010Y	Molecular Medicine in Human Genetic Disease
MSC2020H	Visual Representation of Biomolecular Structure and Function (prerequisites: MSC1001Y, MSC2001H, MSC2003Y)
MSC3001H	Foundations in Musculoskeletal Science
MSC4001H	Foundations in Resuscitation Science Research
MSC6000H	Special Topics Reading Course
MSC7000Y	Regenerative Medicine

[+] *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.*

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):
    - MSC1991Y[0] *Supervised Research Project* (Credit/No Credit).
    - MSC1992Y[0] *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

MSC1991Y[0]	Supervised Research Project (Credit/No Credit)
MSC1992Y[0]	Research Skills for the Physician-Scientist (Credit/No Credit)

Approved Elective Courses by Graduate Unit

Health Policy, Management and Evaluation (Dalla Lana School of Public Health)

HAD5301H	Introduction to Clinical Epidemiology and Health Care Research
HAD5744H	Applied Health Econometrics I
HAD6760H	Introduction to Health Services Research Theory and Methods
MHI3000H	Independent Reading for Health Informatics

Laboratory Medicine and Pathobiology (Temerty Faculty of Medicine)

LMP1100H	Cellular Imaging in Pathobiology
LMP1103H	Tissue Injury, Repair, and Regeneration
LMP1202H	Inflammation, Immunity, and Immunopathology of Atherosclerosis
LMP1205H	The Role of Genomics in the Era of Personalized Medicine
LMP1206H	Next Generation Genomics in Clinical Medicine
LMP1207H	Mass Spectrometry, Proteomics, and Their Clinical Applications
LMP1208H	Molecular Clinical Microbiology and Infectious Diseases
LMP1209H	Neurodegenerative Disease — Mechanisms, Models, and Methods
LMP1504H	Cell and Molecular Biology of Cardiovascular Diseases
LMP1510H	Molecular Biology Techniques

Medical Science (Temerty Faculty of Medicine)

JCV3060H	Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction
JCV3061H	Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System
JCV3062H	Advanced Topics in Cardiovascular Sciences — Heart Function
JCV3063H	Advanced Topics in Cardiovascular Sciences — Vascular
MSC1081H	Studies in Schizophrenia
MSC1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC1088H	Brain Positron Emission Tomography
MSC1089H	The Biopsychosocial Basis of Mental Health and Addictive Disorders

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
Pierno, Franco - BA, MA, PhD
Pietropaolo, Domenico - BSc, MA, PhD
Robins, William - BA, MPH, PhD
Ross, Jill - BA, MA, PhD

Rozemond, Marleen - BA, PhD
Saleh, Walid - BA, MA, PhD
Silano, Giulio - BA, LLB, BEd, MA, PhD
Smith, Kyle - BA, MA, PhD
Stock, Markus - MA, PhD
Subtelny, Maria - BA, PhD
Sweetman, Robert - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Welsh, Jarrett - BA, MA, PhD

Members Emeriti

Armstrong, Lawrin - BA, MA, MA, MDiv, PhD
Burke, James - BA, MA, PhD
Davis, Natalie - BA, MA, PhD
Dooley, Ann - BA, MA, PhD
Dutka, JoAnna - BA, MA, PhD, ARCT
Farge, James - BA, MA, PhD
Frank, Roberta - BA, MA, PhD
Goffart, Walter - AB, AM, PhD
Harvey, Elisabeth Ruth - BA, MPH, PhD
Healey, Antonette - BA, MA, PhD
Hillgarth, Jocelyn - BA, MA, PhD
Hutchison, Ann - BA, MA, PhD
Jeauneau, Edouard - BTh, PhD
Johnston, Alexandra - PhD
Mayer, Hartwig - PhD, PhD
McConica, James - STB, BA, MA, DPhil, FRHistS
McDonough, Christopher - BA, MA, PhD
Murray, Alexander - BA, PhD
Northrup, Linda - BA, MA, PhD
Stock, Brian - AB, PhD
Taylor, Robert - PhD
Townsend, David Robert - BA, MA, PhD

Associate Members

Bolintineanu, Alexandra - BSc, MA, PhD
Bruun, Christer - BA, MA, PhD
Carley, James - BA, MA, PhD
Diem, Albrecht - MA, PhD
Kaczynski, Bernice - BA, MPH, PhD
More, Alison - BA, MA, PhD
O'Hogan, Cillian - PhD

Medieval Studies: Medieval Studies MA

Master of Arts

Program Description

Students may be admitted to a one-year MA program as full-time or part-time.

Students may obtain an MA in Medieval Studies by coursework or by a combination of coursework plus thesis.

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

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 2, 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 Year 3 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 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:
  - 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, 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

7 years

Medieval Studies: Medieval Studies MA, PhD Courses

Not all courses are offered every year. Please consult the Centre for Medieval Studies (CMS)' website which lists the courses that will be offered this year as well as those offered by associated departments. A graduate course is understood to require at least two hours per week of class meeting and such research hours as may be required. Courses marked (PR) have prerequisites; visit the CMS website for details about prerequisites.

Art History

FAH1114H	Multicultural Arts of Medieval Sicily
FAH1118H	The Medieval Treasury
FAH1119H	Global Medieval Art in China
FAH1121H	12th-Century Renaissance?
FAH1125H	Medieval Pilgrimage Art and Architecture
FAH1127H	Early Medieval Art

Book History and Print Culture

BKS1001H	Introduction to Book History
BKS1002H	Book History in Practice
BKS2000H	Advanced Seminar in Book History and Print Culture
BKS2001H	Individual Practicum in Book History and Print Culture

Classics

CLA5007H	Criticism of Latin Poetry

Comparative Literature

COL5032H	Feminist Approaches to Medieval Literature
COL5086H	Literature, Culture, and Contact in Medieval Iberia

English

ENG1001H	Old English I
ENG1002H	Introduction to Old English II: Beowulf
ENG1009H	Writing the Nation: Pre-modern Historigraphies
ENG1011H	Economies of Medieval Drama: East Anglia, Kent, Sussex

ENG1551H	The Canterbury Tales
ENG1552H	Chaucer's Troilus and Criseyde and Other Works
ENG1582H	Piers Plowman
ENG1730H	Medieval Drama: The Biblical Cycles and Fragments

French Language and Literature

FRE1164H	Initiation au français médiéval
FRE1203H	Séminaire de littérature II : période

Germanic Languages and Literatures

GER1200H	Middle High German
GER1220H	Medieval Arthurian Romance

History

HIS1213H	Medieval Institutes of Perfection (joint graduate/undergraduate)
HIS1215H	Social Change in Medieval England, 1154–1279
HIS1221H	Topics in Early Modern European Social History
HIS1283H	Crusades, Conversion, and Colonialization in the Medieval Baltic (joint graduate/undergraduate)

Italian Studies

ITA1025H	Old Italian
ITA1165H	Introduction to Italian Philology
ITA1200H	Dante
ITA1202H	Dante as a Reader of Augustine's City of God: Augustinian Textual Communities at the Beginning of the 14th Century
ITA1203H	Boccaccio
ITA1330H	Petrarch and Petrarchism
ITA1535H	Topics in Italian Literature
ITA1540H	Renaissance Italian Theatre
ITA1597H	The Commedia dell'Arte

Medieval Studies

MST1000Y	Medieval Latin I
MST1001Y	Medieval Latin II
MST1002H	Advanced Medieval Latin: Boethius (PR)
MST1003H	Professional Development for Medieval Studies PhDs (Credit/No Credit)
MST1015H	Medieval Representation of Sexual Dissidence
MST1020H	The Medieval Latin Epic (PR)
MST1021H	The Bibliographic Imagination in the Middle Ages
MST1022H	Transmission and Reception: the Survival and Use of the Latin Classics (Prerequisite: Level One Latin Pass, or permission of instructor. MST1104H or MST1105H is recommended.)
MST1023H	Early Medieval Latin and Greek Poetry
MST1101H	Codicology (PR)
MST1102H	Practical Palaeography (PR)
MST1104H	Latin Palaeography I (PR)
MST1105H	Paleography II (PR)
MST1107H	Latin Textual Criticism (PR)
MST1110H	Diplomatics and Diplomatic Editing (PR)
MST1115H	English Palaeography (PR)
MST1327H	Death, Dying, and Society in Medieval Northern Europe
MST1370H	From Farm to Market: Social and Economic Transformation in Medieval Europe
MST1371H	Old English Philology: Grammar (PR)
MST1372H	Why Europe Grew Rich and Asia Did Not: the Great Divergence Debate
MST1373H	English Language and Literature in Transition, 1100–1250
MST1383H	Poetry and Prose of the Vercelli Book
MST1384H	The Exeter Book of Old English Verse (PR)
MST1388H	The Junius Manuscript: Old Testament Narratives (Prerequisite: ENG1001H or equivalent.)
MST1398H	Alfredian Prose (Prerequisite: ENG1001H or equivalent; MA Latin.)
MST1422H	Introduction to the Study of Magic in the Middle Ages
MST2001H	Old Saxon
MST2007H	Old High German
MST2010H	Old Norse I
MST2015H	Studies in Old Norse Texts (PR)

MST2018H	Introduction to Celtic Latin (Prerequisite: MST1001Y or a pass of Level 2 Latin Exam.)
MST2029H	Introduction to Old Irish (Exclusion: MST2030Y.)
MST2030H	Old Irish Texts (Prerequisite: MST2029H or equivalent. Exclusion: MST2030Y.)
MST2030Y	Old and Middle Irish
MST2032H	Medieval Irish Poetry 500–1600 (PR)
MST2033H	Textual Studies in Medieval Irish Poetry (PR)
MST2037H	Legendary History of Britain and Ireland from Celtic Sources
MST2038H	Medieval Brittany (PR)
MST2040H	Beginnings of Medieval Rhetoric and Poetics (PR)
MST2042H	Medieval Literary Theory in the Later Middle Ages
MST2051H	Introduction to Middle Welsh
MST2052H	Medieval Welsh Texts
MST2055Y	Studies in Middle Welsh Texts (PR)
MST3015H	Introduction to Ge'ez (Classical Ethiopic)
MST3016H	Intermediate Ge'ez (Classical Ethiopic) (Prerequisite: MST3015H.)
MST3021H	Boethius (PR)
MST3022H	Consolation Through the Ages: Later Medieval Approaches to Boethius's Consolation of Philosophy (PR)
MST3035H	Medieval Representations of Death, Sickness, and Crime (1100–1500)
MST3113H	Figures of Heroism in Old English Literature (PR)
MST3123H	Introduction to Medieval Medicine
MST3124H	Medieval Studies in the Digital Age
MST3125H	The Medieval Short Story
MST3126H	The Apocalypse in Medieval English Literature
MST3135H	Digital Old English
MST3140Y	Medieval Catalan Language and Literature
MST3150H	Medieval French Epic: Kings and Heroes (PR)
MST3152H	Introduction to Medieval Occitan (PR)
MST3153H	Medieval Occitan Literature
MST3155H	Middle French Literature
MST3158H	The Roman de la Rose and Medieval Allegory (PR)
MST3159H	Classical Antiquity in the French Middle Ages (PR)
MST3160H	Introduction to Romance Philology: From Vulgar Latin to the First Literary Texts
MST3163H	Medieval French Historiography
MST3164H	Medieval French Romance: The Grail
MST3203H	Topics in Medieval Economic History
MST3205H	Violence in Medieval Society
MST3207H	Decretists and Decretalists: Canonical Jurisprudence 1140–1300
MST3225H	Jews and Christians in Medieval and Renaissance Europe
MST3226H	Medieval Mediterranean History
MST3231H	Clio's Workshop: Introduction to Historical Methods
MST3232H	Vernacular Literature in Medieval Europe: Status and Function (Prerequisite: basic reading knowledge of Latin and at least one medieval vernacular language.)
MST3235H	Communal Florence, 1150–1530
MST3237H	Through the Lens of Monastic Rules and Customaries
MST3241H	Everyday Life in Medieval Europe
MST3242H	Carolingian Europe 750–900 CE
MST3244H	Saints of Early Medieval Italy
MST3251H	The Merovingians
MST3255H	Bishops in the High Middle Ages
MST3301H	Themes in Medieval Philosophy
MST3309H	Birth of the Will: Augustine and Anselm
MST3311H	Topics in Medieval Metaphysics (PR)
MST3321H	Philosophy of Mind in the Middle Ages (PR)
MST3322H	William of Ockham
MST3327H	Free Will and Human Action in Medieval Philosophy
MST3346H	Medieval Islamic Philosophy
MST3501H	Introduction to the Medieval Christian Liturgy
MST3601H	Medieval Spanish Sources in Context
MST3602H	Crime and Punishment in the Middle Ages
MST9310Y, H	Directed Reading
MST9315H	Directed Reading

Near and Middle Eastern Civilizations

NMC1500Y	Archaeology, from Alexander to Muhammad
NMC2090Y	The Prophet and the Caliphates: Early Islamic History to 1258
NMC2119H	Readings in Medieval Arabic Documents
NMC2221H	Persian Mirrors for Princes
NMC2226H	Medieval Persian Historical and Diplomatics

Religion

RLG3653H	Jewish Exegetical Traditions in Antiquity

Slavic Languages and Literatures

SLA1104H	Introduction to Old Church Slavonic (Credit/No Credit)
SLA1109H	Studies in Old Church Slavonic

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
  - Molecular Genetics, MSc, PhD
- Genome Biology and Bioinformatics
  - Molecular Genetics, PhD
- Next-Generation Precision Medicine
  - Molecular Genetics, PhD

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
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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
Andrulis, 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
Guan, 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
Lipshitz, 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
Okamoto, Kenichi - BS, MA, PhD
Osborne, Lucy - PhD
Park, Jeehye - 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
Schramek, 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, Neal 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
Wrana, Jeff - PhD
Yang, Xiaohang - PhD
Youn, 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

Amburgey, Kimberly - MSc
Aronson, Melyssa - BS, MS
Babul-Hirji, Riyana - BSc, MSc
Care, Melanie - BSc, MSc
Carnevale, Amanda - MSc
Carroll, Johanna - BA, PhD
Chitayat, David - MD
Cytrynbaum, 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, Eriskay - 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, MSc
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, Frederic - PhD
Szuto, Anna - MSc
Tam, Karen - BSc, MSc
Teitelbaum, Ronni - BSc, MSc
Thain, Emily - MSc
Uster, Tamarah - BSc, MS
Volenik, Alexandra - MSc
Waldman, Larissa - MSc
Watkins, Nicholas - MSc
Watts-Dickens, Abby - MSc
Weksberg, Rosanna - MD, PhD

Winter, Laura - MSc
Yoon, Grace - MD
Zahavich, Laura - MSc

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 and/or clinical genetics. Students must present the independent research project both orally and in a written format suitable for publication.
  - 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

MSC2010Y	Molecular Medicine in Human Genetic Disease
MMG1120Y+	Clinical Rotations I
MMG1122Y	Issues in Genetic Counselling I
MMG1124Y	Principles of Effective Counselling
MMG1126Y	Clinical Issues in Pregnancy and Child Development
MMG1128Y	Risk Calculation and Research Methodology
MMG1130Y	Tutorial in Molecular Genetics
MMG1132H	Laboratory Skills
MMG1220Y	Clinical Rotations II
MMG1222Y	Issues in Genetic Counselling II
MMG1224Y	Advanced Principles of Effective Counselling
MMG1226Y	Concepts in Clinical Genetics
MMG1228Y	Independent Research Project
MMG1230H	Cancer Genetic Counselling

+ *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[0] *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

[0] Course that may continue over a program. Credit is given when the course is completed.

Molecular Genetics: Medical Genomics MHSc Courses

Required Courses

MMG3001Y (2.0 FCEs)	Advanced Human Genetics
MMG3002Y	Biological Statistics
MMG3003Y (2.0 FCEs)	Genomics Methodologies
MMG3004Y	Communication of Genetic Information
MMG3005Y	Ethical and Legal Implications of Genomics
MMG3006Y[0]	Future Directions in Medical Genomics (Credit/No Credit)

[0] Course that may continue over a program. Credit is given when the course is completed.

Required Elective (choose one)

MMG3007Y	Clinical Practicum in Medical Genomics (Credit/No Credit)
MMG3008Y	Practicum in Modern Genomics (Credit/No Credit)

Molecular Genetics: Molecular Genetics MSc

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 PhD

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)

    - MMG1112H (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:
    - 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 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:
    - MMG1001H (0.5 FCE)
    - MMG1003H (0.25 FCE)
    - MMG1004H (0.25 FCE)
    - MMG1113H (0.25 FCE)
    - 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:
    - MMG1115H (0.5 FCE)
    - 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:
    - MMG1111H (0.0 FCE, Credit/No Credit)
    - MMG1112H (0.0 FCE, Credit/No Credit).
- A **thesis** on a research project.
- 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:
    - 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 is asked to complete and defend an MSc thesis; 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

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:
    - MMG1001H (0.5 FCE)
    - MMG1003H (0.25 FCE)
    - MMG1004H (0.25 FCE)
    - MMG1113H (0.25 FCE)
    - MMG1114H (0.25 FCE)
    - MMG1115H (0.5 FCE)
    - 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:

    - MMG1111H (0.0 FCE; Credit/No Credit)
    - MMG1112H (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 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

JBB1425H (0.5 FCE)	Structural Biology: Principles and Practice
JBB2025H (0.5 FCE)	Protein Crystallography
JDB1024Y (1.0 FCE)	Topics in Developmental Biology
JDB1025H (0.5 FCE)	Developmental Biology
JDB1026Y (1.0 FCE)	Student Seminars in Developmental Biology
MMG1001H (0.5 FCE)	Foundational Genetic Approaches I
MMG1003H (0.25 FCE)	First Year Colloquium
MMG1004H (0.25 FCE)	A Practical Course in Programming for Biologists
MMG1111H (0.0 FCE)	Graduate Seminars I (Credit/No Credit)
MMG1112H (0.0 FCE)	Graduate Seminars II (Credit/No Credit)
MMG1113H (0.25 FCE)	MSc Presentation Skills
MMG1114H (0.25 FCE)	MSc Presentation
MMG1115H (0.5 FCE)	PhD Presentation
MMG1301H (0.25 FCE)	Developmental Neurobiology
MMG1304H (0.25 FCE)	Bacterial Pathogens
MMG1319H (0.25 FCE)	Genomics of Infectious Diseases
MMG1324H (0.25 FCE)	Mitochondrial Genetics in Health and Disease
MMG1325H (0.25 FCE)	Molecular Mechanisms of Mood and Mind (M4)
MMG1326H (0.25 FCE)	Post-Transcriptional Regulatory Mechanisms
MMG1331H (0.25 FCE)	Stem Cells II
MMG1333H (0.25 FCE)	Virus Replication
MMG1344H (0.25 FCE)	Foundational Computational Biology I (exclusion: MMG1004H)
MMG1345H (0.25 FCE)	Foundational Computational Biology II (exclusion: MMG1004H)
MMG1425H (0.5 FCE)	Signal Transduction and Cell Cycle Regulation
MMG1451H (0.5 FCE)	Genetic Analysis of Development: Yeast and Worms

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:

- Aging, Palliative and Supportive Care Across the Life Course
  - Music, MA, PhD
- Book History and Print Culture
  - Music, MA, PhD
- Environmental Studies
  - Music, MA, PhD
- Environment and Health
  - Music, MA, MMus, PhD
- Jewish Studies
  - Music, MA, PhD
  - Music Performance, DMA
- Neuroscience
  - Music, MA, PhD
- Sexual Diversity 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

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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

Kulesha, Gary - AA, ARCT, ARCT
Lee, Sherry - BMus, MMus, PhD
Lockhart, Ellen - PhD
Macdonald, Lorna - BME, MMus
MacKay, Gillian - BMus, MMus, DMA
McClelland, Ryan - BMus, MM, PhD ***(Associate Dean, Academic and Student Affairs)***
McFadden, Jeffrey - BMus, MusM, MusDoc
McLean, Don - PhD ***(Dean)***
McLeod, Kenneth - AM, PhD
Packman, Jeff - BS, MA, PhD ***(Associate Dean, Graduate Education)***
Palej, Norbert - BM, MM, DMA
Parker, James - BMus, MM, DMA, ARCT
Parker, Mary Ann - BA, MM, PhD, ARCT
Patipatanakoon, Annalee - BAMus
Patrick, Dennis - MusBac, MMus
Philcox, Steven - BM, MM
Pilzer, Joshua David - BA, MA, PhD
Promane, Terry
Rapoport, Alexander - MMus, MusDoc
Reynolds, Jeffrey - BMus, BA, MA, MMus, PhD
Rolston, Shauna - BA, MM
Sallmen, Mark - BM, MA, PhD
Sanger-Kippen, Annette Edith - BAMus, PhD
Suzuki, Kotoka - BM, MusD
Taylor, Daniel - MM
Thaut, Michael - PhD
Vande Moortele, Steven - PhD ***(Associate Dean, Research)***

Members Emeriti

Aide, William - BSc
Beach, David - BA, MusM, PhD

Associate Members

Hennigar, Harcus - BMus, BA
Hetherington, David - BA, ARCT
John, Bina - BM, BE, MM, MusD
Murley, Mike - BFA
Nediger, Charlotte - MMus
Nielsen, Wendy - BMus, MM
Sanborn, Chase
Sicsic, Nancy - MMus
Watts, Camille - BMus

Music: Music MA; Field: Ethnomusicology

Master of Arts (Field: Ethnomusicology)

Minimum Admission Requirements

- 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.
- 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 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.

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 and Health Sciences

Master of Arts (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.
- A Bachelor of Music or Bachelor of Music Therapy degree 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 who have taken

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[0] *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

[0] *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[0]) 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

[0] 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 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* 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 fulfil the following requirements by the end of Year 2:
    - **3.0 full-course equivalents (FCEs)** as follows:
        - 0.5 FCE: MUS1250H *PhD Seminar*, taken in the first session
        - 0.5 FCE: MUS1997H[0] *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 MUS1997H[0] *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 MUS1997H[0] must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS1997H[0], 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[0]. 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[0] *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[0] must then be agreed upon. The supervisor will be primarily responsible for determining the structure and content of MUS1997H[0], 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

[0] Course that may continue over a program. The course is graded when completed.

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):
    - MUS7995Y[0] *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[0] *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. Students in the Collaborative Specialization in Aging, Palliative and Supportive Care Across the Life Course or the Collaborative Specialization in Neuroscience may use the core course(s) from the collaborative specialization for these electives.
- **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

[0] 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 MUS2995Y[0] *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.

Program Length

4 years full-time

Time Limit

6 years full-time

[0] Course that may continue over a program. The course is graded when completed.

PhD Program (Flexible-Time)

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.
- 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 fulfil the academic requirements of a PhD program.

Program Requirements

- **Coursework.** Students must complete **6.0 full-course equivalents (FCEs)** including:
    - At least 2.0 FCEs (including MUS2995Y[0] *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

6 years

Time Limit

8 years

[0] Course that may continue over a program. The course is graded when completed.

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 fulfil 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[0] *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[0], 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 fulfil 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 fulfil 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 MUS1999H^0, 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: MUS1999H^0 *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 fulfil 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 fulfil 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

5 years

Time Limit

7 years

[0] Course that may continue over a program. The course is graded when completed.

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: MUS3997H[0] *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 MUS3997H[0] *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 fulfil 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 fulfil 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 MUS3997H^0 *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: MUS3997H^0 *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 fulfil 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 fulfil 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.

MUS1000H	Introduction to Music Research I
MUS1002H	Fieldwork Methods and Practicum
MUS1042H	The Ballets Russes
MUS1055H	Oratorio
MUS1056H	Approaches to Meaning in the Renaissance Motet
MUS1057H	Performing Politics: Individuality and the Collective in Music and Dance
MUS1058H	Music and Politics
MUS1059H	Ars Nova
MUS1061H	Performance Space in Seventeenth-Century Music
MUS1065H	Music History Pedagogy
MUS1066H	Music and the Racial and Ethnic Imaginations
MUS1069H	Remix Music, from Analogue to Digital
MUS1070H	Music, Genre, and Variation
MUS1131H	Popular Music and the Immaterial: From Spirituality to Virtuality
MUS1132H	Community-Engaged Music Archiving
MUS1134H	Music, Capital, Markets, and Industries
MUS1135H	Music, Sound, and the Environment
MUS1137H	Nationalism in Music and Dance
MUS1140H	Romantic Musings on the Middle Ages
MUS1141H	Ethnomusicology of Voice
MUS1144H	Music in the Films of Sir Alfred Hitchcock
MUS1145H	Sonic Innovations in Black Popular Musics
MUS1146H	Geographies of Opera: Wagner and Puccini
MUS1147H	Music After the DJ, from Soundsystems to Serato
MUS1149H	Jews' Sonic Worlds from Early Modernity to the Present
MUS1150H	Music and Land: Sounds of Belonging and Exclusion
MUS1169H	Listening to Cities: Music, Sound, and Noise in Urban Environments
MUS1223H	Virtuosity in Baroque Music
MUS1234H	Health, Aging and Popular Music
MUS1235H	Topics in Music and the History of Medicine
MUS1236H	Haydn
MUS1240H	Diegetic Music in Film
MUS1246H	Music and Colonialism
MUS1250H	PhD Seminar
MUS1254H	Critical Approaches to Popular Music
MUS1255H	Issues in Music and Philosophy
MUS1258H	Keywords in African Sound
MUS1260H	Music and the Enlightenment
MUS1267H	Popular Music and Identity
MUS1270H	Music and East Asian Modernity
MUS1271H	Music and Circulation
MUS1272H	19th Century Music and Discourses of Nature
MUS1275H	Sound and Music in the Middle East
MUS1276H	Music and Material Culture
MUS1277H	Ethnomusicology and Cultural Geography
MUS1278H	Music and Cultures of Listening in Late Modernity
MUS1279H	Ethnomusicology without Music
MUS1280H	Analysis and its Futures in Ethnomusicology
MUS1281H	Ethnomusicology Dissertation Writing Seminar
MUS1317H	Music in Canada
MUS1990H	MA Major Paper or Project
MUS1997H[0]	Research in Ethnomusicology
MUS1998H	Individual Reading and Research
MUS1999H[0]	Research in Musicology

[0] Course that may continue over a program. The course is graded when completed.

Music: Music MA, PhD; Field: Music and Health Sciences Courses

MUS7110H	Neurosciences of Music: Scientific Foundations, Clinical Translations
MUS7199H[0]	Special Research Topic in Music and Health
MUS7400H	Introduction to Music and Health Care
MUS7405H	Health in Music Performance
MUS7406H	Music Psychology
MUS7407H[0]	Clinical Research Practicum
MUS7412H	Elementary Improvisation Methods
MUS7415H	Topics in Music and Health
MUS7416H	Topics in Music and Health II
MUS7995Y[0]	Music and Health Doctoral Research Project
MUS7998H[0]	Readings in Advanced Topics in Music and Health

[0] Course that may continue over a program. The course is graded when completed.

Music: Music MA, PhD; Field: Music Education Courses

MUS2001H	Music in Cultural Perspective
MUS2004H	Music in Childhood
MUS2010H	Music and Social Movements
MUS2111H	Introduction to Research in Music Education
MUS2112H	Advanced Topics in Research in Music Education (prerequisite: MUS2111H)
MUS2113H	Musically Queer
MUS2115H	Truth and Reconciliation
MUS2116H	Moral Economy of Death in Music, Education, and Pedagogy
MUS2117H	Sound Studies and Music Education
MUS2132H	Jazz Education
MUS2151H	Philosophy and Music Education
MUS2160H	Contemporary Perspectives in Music Education
MUS2167H	Curriculum Inquiry
MUS2175H	Teacher Perspectives in Music Education
MUS2176H	Social Psychology of Music
MUS2185H	Curriculum and Instruction in Instrumental Music
MUS2186H	(Un)popular Music Education
MUS2199H[0]	Special Topics in Music Education
MUS2203H	Development of the Wind Band
MUS2222H	Conducting and Teaching Choral Music I
MUS2223H	Conducting and Teaching Choral Music II
MUS2990Y[0]	MA Major Essay (Music Education)
MUS2995Y[0]	Music Education Doctoral Research Project
MUS2998H	Reading in Advanced Topics in Music Education
MUS3231H	Conducting for Composers
MUS7406H	Music Psychology
MUS7412H	Elementary Improvisation Methods

[0] Course that may continue over a program. The course is graded when completed.

Music: Music MA, PhD; Field: Music Theory Courses

MUS1250H	PhD Seminar
MUS1990H	MA Major Paper
MUS1998H	Individual Reading and Research
MUS3101H	Seminar in Schenkerian Analysis I
MUS3113H	Symphonic Modernisms, 1900–1925
MUS3232H	Romantic Form
MUS3243H	The Music of Elliott Carter
MUS3245H	Music of Ligeti and Lutoslawski
MUS3248H	Current Compositional Practices
MUS3251H	Late Schubert
MUS3261H	Theory and Analysis of Popular Music
MUS3306H	Pedagogy of Music Theory
MUS3309H	Brahms: Symphonies and Chamber Music
MUS3316H	Cognitive Perspectives in Music Theory
MUS3403H	Theory and Analysis of Atonal Music
MUS3404H	Extended Tonal Techniques in Twentieth-Century Music

MUS3405H	Topics in the History of Music Theory: 1600–1950
MUS3412H	Theories of Rhythm and Metre
MUS3413H	Music and Drama in Wagner's Ring des Nibelungen
MUS3997H[0]	Research in Music Theory

[0] Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Applied Music and Health

Master of Music (Field: Applied Music and Health)

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 and interview.

Program Requirements

- **Coursework.** Students must complete **7.0 full-course equivalents (FCEs)** as follows:
  - 1.0 FCE: MUS4165Y[0] *Applied Music for Clinical Practice* (Year 1)
  - 0.5 FCE: MUS7110H *Neurosciences of Music: Scientific Foundations, Clinical Translations* (Year 1)
  - 0.5 FCE: MUS7400H *Introduction to Music and Health Care* (Year 1)
  - 0.5 FCE: MUS7407H[0] *Clinical Research Practicum* (Year 1)
  - 0.5 FCE: MUS7412H *Elementary Improvisation Methods* (Year 1)
  - 0.5 FCE: MUS7415H *Topics in Music and Health Care I* (Year 1)
  - 0.5 FCE: MUS7416H *Topics in Music and Health Care II* (Year 2)
  - 1.0 FCE: MUS4112Y *Clinical Performance Practicum* (Year 2)
  - 1.0 FCE: MUS4115Y *Principles of Clinical Performance Pedagogy* (Year 2)
  - 1.0 FCE: general electives (in Music or, with permission, outside of Music).
- 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.

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 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: MUS4444Y[0] *Applied Music I*
  - 1.0 FCE: MUS4445Y[0] *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* **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*.

- **Two recitals**, one in each year:
  - 1.0 FCE: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: 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.
- Applicants must submit several original compositions, at least one of which shall be with moderately large instrumentation.

Program Requirements

- **Coursework.** Students must complete a minimum of **6.0 full-course equivalents (FCEs)** taken over two years, including:
  - 1.0 FCE: MUS3100Y *MMus Advanced Composition I*
  - 1.0 FCE: MUS3105Y *MMus Advanced Composition II*
  - 1.0 FCE: MUS3990Y *MMus Composition Thesis*
  - 3.0 elective FCEs.
- Students may be required to take courses in addition to the 6.0 FCEs based on the results of diagnostic tests in musical analysis, counterpoint, and harmony given upon entrance.
- Under the guidance of an advisor, each student will prepare an **original composition** in large form or an electroacoustic composition of comparable dimensions which will be defended at a **Final Oral Examination**.

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: Conducting

Master of Music (Field: Conducting)

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: MUS4444Y[0] *Applied Music I*
  - 1.0 FCE: MUS4445Y[0] *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: MUS2203H *Development of the Wind Band*
    - 0.5 FCE: MUS4226H *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*

        - 0.5 FCE: MUS4224H *Choral Conducting II*
        - 1.0 FCE: MUS4225Y *Advanced Choral Conducting*
        - 1.0 FCE: MUS4230Y *Vocal-Choral Pedagogy for Conductors*
        - 0.5 FCE: MUS4700H *Major Ensemble I* (choral).
- **Two recitals**, one in each year:
    - 1.0 FCE: MUS6666Y[0] *Recital I*
    - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: 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: MUS4444Y[0] *Applied Music I* and MUS4445Y[0] *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:
            - MUS4774H *Schola Cantorum I* and MUS4775H *Schola Cantorum II* **or**
            - MUS4776H *Collegium Musicum I* and MUS4777H *Collegium Musicum II*
    - 2.0 elective FCEs from a specified list approved by the department.
- **Two recitals**, one in each year. Recitals may include a chamber component with the approval of the department.
    - 1.0 FCE: MUS6666Y[0] *Recital I*
    - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: MUS4444Y[0] *Applied Music I* and MUS4445Y[0] *Applied Music II*
    - 1.0 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*
    - Students in brass, percussion, strings, and woodwinds will complete 1.0 FCE as two years of ensemble performance. Placement to be determined by audition.

- 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: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: 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: MUS4444Y[0] *Applied Music I*
  - 1.0 FCE: MUS4445Y[0] *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* **or**
    - 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: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: 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);

    - released body of musical works/recordings as composer, sound engineer, or producer.
- Selected applicants must pass an audition and interview.

Program Requirements

- **Coursework.** Students must complete **7.0 full-course equivalents (FCEs)** as follows:
    - 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.
    - 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: MUS3666Y[0] *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. Credit is given when the course is completed.

Music: Music Performance; MMus Field: Opera

Master of Music (Field: Opera)

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:
    - 1.0 FCE: MUS4200Y *Critical Approaches to Music History*, taken in Year 1
    - 0.5 FCE: MUS4210H *Introduction to Music Analysis*
    - 1.0 FCE: MUS4444Y[0] *Applied Music I*
    - 1.0 FCE: MUS4445Y[0] *Applied Music II*
    - 1.0 FCE: MUS4513Y *Operatic Repertory*, taken in Year 2
    - 2.0 FCEs: MUS4900Y *Operatic Studies I* and MUS4901Y *Operatic Studies II*
    - 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 MUS4966Y[0] *Operatic Roles I* (1.0 FCE) and MUS4988Y[0] *Operatic Roles II* (1.0 FCE).

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:
  - 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: MUS4444Y[0] *Applied Music I.*
  - 1.0 FCE: MUS4445Y[0] *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: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: Vocal

Master of Music (Field: Vocal)

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:
  - 4.0 FCEs must include:
    - 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: MUS4444Y[0] *Applied Music I*
    - 1.0 FCE: MUS4445Y[0] *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*
  - 3.0 FCEs: electives chosen from a specified list approved by the department.
- **Two recitals.** Recitals may include a chamber music component with the approval of the department.
  - 1.0 FCE: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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: 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*
    - MUS4231H *Advanced Vocal Repertoire Study I*
  - 1.0 FCE: MUS4240Y *Introduction to Voice Pedagogy and Vocology*
  - 1.0 FCE: MUS4241Y *Advanced Vocal Pedagogy and Vocology*
  - 0.5 FCE: MUS4248H *Optimizing the Singing Mind*
  - 1.0 FCE: MUS4444Y[0] *Applied Music I*
  - 1.0 FCE: MUS4445Y[0] *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: MUS7406H *Music Psychology*
  - 0.5 FCE: elective chosen from a list of courses approved by the department.
- **Two recitals:**
  - 1.0 FCE: MUS6666Y[0] *Recital I*
  - 1.0 FCE: MUS8888Y[0] *Recital II*.

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 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.
- Two or more extended compositions in various media and a recording of at least one of these works must be submitted together with the application and complete academic credentials.

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[0] *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** (MUS3888Y[0] *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

4 years full-time

Time Limit

6 years full-time

[0] Course that may continue over a program. The course is graded when completed.

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: MUS4844Y[0] *Advanced Applied Music I*.
  - 1.0 FCE: MUS4845Y[0] *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
    - MUS4845Y[0] *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: MUS4866Y[0] *DMA Recital I*
  - 1.0 FCE: MUS4877Y[0] *DMA Recital II*
  - 1.0 FCE: MUS4888Y[0] *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

[0] Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus; Field: Applied Music and Health Courses

MUS4112Y	Clinical Performance Practicum
MUS4115Y	Principles of Clinical Performance Pedagogy
MUS4165Y[0]	Applied Music for Clinical Practice
MUS4166Y	Performance Project (Credit/No Credit)
MUS4188Y	Public Capstone Presentation
MUS7110H	Neurosciences of Music: Scientific Foundations, Clinical Translations
MUS7400H	Introduction to Music and Health Care
MUS7407H[0]	Clinical Research Practicum
MUS7412H	Elementary Improvisation Methods
MUS7415H	Topics in Music and Health Care I
MUS7416H	Topics in Music and Health Care II

[0] 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.

MUS3100Y	MMus Advanced Composition I
MUS3101H	Seminar in Schenkerian Analysis I
MUS3102H	Seminar in Schenkerian Analysis II
MUS3105Y	MMus Advanced Composition II
MUS3110H	Classical Orchestration
MUS3114H	Counterpoint and Diversity
MUS3116H	Learning from the Visual Arts for Composers
MUS3203H	Score Analysis for Composers and Conductors
MUS3204H	Advanced Orchestration
MUS3212H	Music and Popular Entertainments
MUS3213H	Composing for Chamber Ensemble
MUS3222H	Composing for Film

MUS3223H	Berg
MUS3224H	Sonata Form
MUS3225H	Music of Gubaidulina, Coulthard, and Chen
MUS3229H	The Twentieth-Century Symphony
MUS3231H	Conducting for Composers
MUS3232H	Romantic Form: The Orchestral Music of Berlioz, Mendelssohn, Schumann, and Wagner
MUS3233H	Compositional Identity and Practice in the 21st Century
MUS3244H	Music Recording
MUS3245H	The Music of Ligeti and Lutoslawski
MUS3258H	Songwriting (prerequisite: MIDI Orchestration and Improvisation)
MUS3260H	The New Polish School of Composition
MUS3300Y	DMA Advanced Composition I
MUS3305Y	DMA Advanced Composition II
MUS3306H	Pedagogy of Music Theory
MUS3309H	Brahms: Symphonies and Chamber Music
MUS3403H	Theory and Analysis of Atonal Music
MUS3404H	Extended Tonal Techniques in the Twentieth Century
MUS3409H	Advanced Analysis
MUS3410H	Advanced Analysis: 1850–1910
MUS3412H	Theories of Rhythm and Metre
MUS3415H	Introduction to Operatic Composition
MUS3421H	Composing for Theatre
MUS3512H	Research in Composition
MUS3800H	Electroacoustic Music
MUS3801H	Advanced Electro-acoustic Composition
MUS3888Y[0]	DMA Recital of Works
MUS3990Y	MMus Composition Thesis
MUS3998H	Reading and Research in Composition
MUS3999Y[0]	Research in Composition
MUS4615H	Analysis and Performance Practices of Twentieth-Century Music

[0] Course that may continue over a program. The course is graded when completed.

Music: Music Performance MMus, DMA; Field: Performance Courses

MUS4200Y	Critical Approaches to Music History
MUS4210H	Introduction to Music Analysis
MUS4213H	Advanced Repertoire for Singers and Pianists I
MUS4214H	Advanced Repertoire for Singers and Pianists II
MUS4219H	Perspectives on the Business of Music Performance
MUS4220H	Orchestral Conducting I
MUS4221H	Orchestral Conducting II
MUS4222Y	Advanced Orchestral Conducting
MUS4223H	Choral Conducting I
MUS4224H	Choral Conducting II
MUS4225Y	Advanced Choral Conducting
MUS4226H	Wind Ensemble Conducting I
MUS4227H	Wind Ensemble Conducting II
MUS4228H	Advanced Wind Conducting I
MUS4229H	Advanced Wind Conducting II (prerequisite: MUS4228H)
MUS4230Y	Vocal-Choral Pedagogy for Conductors (prerequisite: graduate standing in the choral conducting, voice performance, or music education program, and permission of instructors)
MUS4231H	Advanced Vocal Repertoire Study I
MUS4232H	Advanced Vocal Repertoire Study II
MUS4234H	Explorations in Performance
MUS4240Y	Introduction to Voice Pedagogy and Vocology
MUS4241H	Advanced Vocal Pedagogy and Vocology
MUS4242Y	Advanced Concepts in Singing and Vocology
MUS4248H	Optimizing the Singing Mind
MUS4270H	Piano Pedagogy: Beginning and Intermediate Levels
MUS4271H	Practicum: Beginning and Intermediate Levels
MUS4272H	Piano Pedagogy: Advanced and University Levels
MUS4273H	Practicum: Advanced and University Levels
MUS4298H	Readings and Research in Performance Studies

MUS4300Y	Seminar in Jazz Studies
MUS4302H	Advanced Ear Training and Harmony
MUS4303H	Rhythm for Improvisation
MUS4310Y	Advanced Jazz Composition and Arranging I
MUS4311Y	Advanced Jazz Composition and Arranging II
MUS4312H	Advanced Jazz Improvisation I
MUS4313H	Advanced Jazz Composition and Arranging II (prerequisite: MUS4310Y)
MUS4314H	Advanced Jazz Improvisation 2
MUS4376H	Piano Literature — Baroque and Classical
MUS4377H	Piano Literature — Romantic and Contemporary
MUS4420H	Fretboard Harmony: Common Practice Harmony on the Guitar
MUS4425H	Guitar Pedagogy: Method and Practice
MUS4435H	History and Literature of the Guitar
MUS4438H	Improvisation for Strings
MUS4439H	Flute-Guitar Masterclass
MUS4440H	Flute-Guitar Masterclass II
MUS4444Y[0]	Applied Music I
MUS4445Y[0]	Applied Music II
MUS4502H	Collaborative Piano Techniques I
MUS4506H	Sonata Coaching I
MUS4507H	Sonata Coaching II
MUS4508H	Collaborative Piano Techniques II (prerequisite: MUS4502H)
MUS4509H	Collaborative Piano Techniques II Vocal (prerequisite: MUS4502H)
MUS4512H	Operatic Répétiteur
MUS4513Y	Operatic Repertory
MUS4520H	Advanced Diction Studies I
MUS4521H	Advanced Diction Studies II
MUS4522H	Advanced Diction Studies III
MUS4523H	Advanced Diction Studies — English
MUS4600H	Performance Practices Before 1800
MUS4606H	Special Topics in Performance Practice
MUS4608H	World Music Ensembles: Practical and Analytical Studies
MUS4610H	Analysis and Performance: Music of the Eighteenth and Nineteenth Centuries
MUS4613H	Performance Techniques for Hospice Palliative Care
MUS4615H	Analysis and Performance Practices of Twentieth-Century Music
MUS4616H	Topics in Interactive Digital Media and Performance
MUS4617H	The 21st Century Creative Performer: An Interdisciplinary Inquiry to Performance and Performance Practice
MUS4620H	Analysis and Performance of Chamber Music
MUS4626H,Y	Music Internship (Credit/No Credit)
MUS4700H	Major Ensemble I
MUS4701H	Major Ensemble II
MUS4702H	Major Ensemble III
MUS4703H	Major Ensemble IV
MUS4706H	Contemporary Chamber Ensemble I
MUS4707H	Contemporary Chamber Ensemble II
MUS4710H	Chamber Music I
MUS4711H	Chamber Music II
MUS4712H	Chamber Music III
MUS4716H	Chamber Choir III
MUS4720H	Opera I
MUS4721H	Opera II
MUS4722H	Opera III
MUS4723H	Opera IV
MUS4740H	Small Group Jazz Performance I
MUS4741H	Small Group Jazz Performance II
MUS4742H	Small Group Jazz Performance III
MUS4747H	Baroque String Repertoire
MUS4750H	Jazz Orchestra I
MUS4751H	Jazz Orchestra II
MUS4752H	Jazz Orchestra III
MUS4753H	Jazz Orchestra IV
MUS4760H	Vocal Jazz Ensemble I
MUS4761H	Vocal Jazz Ensemble II
MUS4762H	Vocal Jazz Ensemble III
MUS4763H	Vocal Jazz Ensemble IV
MUS4767H	Instrumental Performance Class Woodwinds II
MUS4770H	Oratorio Ensemble I

MUS4771H	Oratorio Ensemble II
MUS4774H	Schola Cantorum I
MUS4775H	Schola Cantorum II
MUS4776H	Collegium Musicum I
MUS4777H	Collegium Musicum I
MUS4785H	Orchestral Studies I
MUS4786H	Orchestral Studies II
MUS4787H	Instrumental Performance Class Woodwinds
MUS4791H	Instrumental Performance — Guitar
MUS4792H	Instrumental Performance — Guitar II
MUS4795H	Piano/Instrumental I
MUS4796H	Piano/Instrumental II
MUS4800H	DMA Seminar
MUS4810H	Seminar in Performance Literature
MUS4815H	Seminar in Performance Pedagogy
MUS4816H	Researching Performance/Performing Research
MUS4817H	Nineteenth-Century Music in Context: Beethoven to Mahler
MUS4819H	String Pedagogy Practicum (prerequisite: MUS4815H)
MUS4820H	DMA Study in Masterclass Teaching
MUS4821H	DMA Study in Undergraduate Piano Pedagogy
MUS4823H	Sound and Vision: Techniques in Research-Creation
MUS4826H	Core and Current Readings in Jazz Scholarship
MUS4838H	Twentieth- and Twenty-First-Century Interpretive Analysis
MUS4844Y[0]	Advanced Applied Music I
MUS4845Y[0]	Advanced Applied Music II
MUS4855Y	DMA Elective Recital
MUS4866Y[0]	DMA Recital I
MUS4877Y[0]	DMA Recital II
MUS4888Y[0]	DMA Recital III
MUS4899H	Research in Performance
MUS4899Y	Research in Performance
MUS4900Y	Operatic Studies I
MUS4901Y	Operatic Studies II
MUS4966Y[0]	Operatic Roles I
MUS4988Y[0]	Operatic Roles II
MUS5700H	Piano Master Class I
MUS5701H	Piano Master Class II
MUS5703H	Piano Master Class IV
MUS5704H	Violin Master Class I
MUS5705H	Violin Master Class II
MUS5706H	Violin Master Class III
MUS6666Y[0]	Recital I
MUS7412H	Elementary Improvisation Methods
MUS8888Y[0]	Recital II

[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

MUS3610H	Music Entrepreneurship: Music and Cities
MUS3611H	Creative Applications of Technology I
MUS3612H	Creative Applications of Technology II (prerequisite: MUS3611H)
MUS3613H	Musical Acoustics (exclusion: TMU127H)
MUS3614H	Sound Recording I
MUS3615H	Sound Recording II (prerequisites: MUS3611H and MUS3614H)
MUS3616H	Music Mixing and Production (prerequisites: MUS3612H and MUS3615H)
MUS3617H	Production for Multi-Channel Immersive Audio (prerequisites: MUS3612H and MUS3616H)
MUS3618H	Studio Orchestration and Arranging
JDM3619H	Digital Media Distribution (Credit/No Credit)
MUS3624H	Topics in Interactive Digital Media and Performance
MUS3630H	Interactive Music and Sound for Video Games
MUS3632H	Video for Intermedia Performance
MUS3666Y[0]	Music Technology and Digital Media Major Project (Credit/No Credit)
MUS3805H	Max/MSP
MUS3806H	Computer-Assisted Sound Design and Composition (prerequisites: MUS3611H, MUS3612H, or equivalent)

[0] Course that may continue over a program. Credit is given when the course is completed.

Music: Courses Recognized for MMus in Music Performance and MA Graduate Credit

Available to MA students only with the permission of the department.

MUS1090H	Topics in Ethnomusicology

Near and Middle Eastern Civilizations

NMC: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Near and Middle Eastern Civilizations

MA and PhD

- Fields:
  - Ancient and Near Eastern Studies;
  - 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
  - Near and Middle Eastern Civilizations, MA, PhD
- Jewish Studies
  - Near and Middle Eastern Civilizations, MA, PhD
- Mediterranean Archaeology
  - Near and Middle Eastern Civilizations, PhD
- Sexual Diversity Studies
  - Near and Middle Eastern Civilizations, MA, PhD
- Women and Gender Studies
  - 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

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Canada

Near and Middle Eastern Civilizations: Graduate Faculty

Full Members

Aksan, Virginia - BA, MA, MLS, PhD
Bahoora, Haytham - BA, MA, PhD
Beaulieu, Paul-Alain - LLB, BA, MA, PhD
Daviau, Michele - MTh, PhD
Fox, Harry - BSc, BA, MS, MA, PhD
Goebs, Katja - MA, DPhil
Grzymski, Krzysztof - MA, PhD
Hanssen, 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
Metso, Sarianna - MA, PhD
Miller, Jeanne - BA, MA, PhD ***(Associate Chair, Graduate)***
Mittermaier, Amira - MA, PhD
Moumtaz, Nada - PhD
Newman, Judith - PhD
Ostapchuk, Victor - BA, PhD
Pouls Wegner, Mary-Ann - BA, PhD
Raffaelli, 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, Rivanne - 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

NMC1001Y	Introduction to Old Babylonian
NMC1002Y	Selected Standard Babylonian Texts
NMC1003Y	Akkadian Historical Texts
NMC1004Y	Intermediate Sumerian
NMC1005Y	The Assyrian Language
NMC1008Y	Babylonian Archival Texts (Late Periods) (prerequisite: NMC1001Y)
NMC1009Y	Introduction to Sumerian

Ancient Egyptian Language and Literature

NMC1201Y	Introduction to Middle Egyptian
NMC1202Y	Middle Egyptian Texts
NMC1203Y	Late Egyptian Texts
NMC1204Y	Cursive Script
NMC1209H	Old Egyptian Texts
NMC1210H	Ancient Egyptian Historical Texts
NMC1213H	Ancient Egyptian Religious and Funerary Literature
NMC1215H	Ancient Egyptian Instructional Texts (prerequisites: NMC1201Y, NMC1202Y)

Arabic Studies

NMC2100Y	Elementary Modern Standard Arabic
NMC2101Y	Intermediate Standard Arabic I
NMC2102Y	Intermediate Standard Arabic II
NMC2103Y	Advanced Standard Arabic
NMC2110H	Al-Jahiz and His Debate Partners
NMC2111H	Medieval Arabic Rhetoric
NMC2130H	Adab and Arabic Literary Prose
NMC2131H	Premodern Arabic Poetry

Aramaic-Syriac Language and Literature

NMC1100Y	Introduction to Aramaic
NMC1101Y	Early Syriac Texts
NMC1102Y	Palestinian Aramaic Texts
NMC1105Y	Syriac Historical Texts
NMC1106Y	Syriac Exegetical Texts
NMC1110H	Palestinian Targum
NMC1111Y	Babylonian Aramaic

Archaeology

NMC1400H	The Archaeology of the Pre- and Protohistoric Civilizations of the Near East
NMC1404H	Archaeological Reconstructions of Pottery Production and Consumption in the Middle Euphrates
NMC1406Y	Problems in the Archaeology of Bronze Age Syria-Palestine
NMC1408Y	Seminar in the Archaeology of Syria-Palestine
NMC1409H	Archaeology and Material Culture of Ancient Egypt I
NMC1410H	Archaeology and Material Culture of Ancient Egypt II
NMC1411H	Near Eastern Ceramics I
NMC1412H	Near Eastern Ceramics II
NMC1414H	Egyptian Artifacts
NMC1416H	Egyptian Iconography
NMC1418Y	Archaeology of Nubia
NMC1419Y	Art, Archaeology and Culture of Egypt in the Age of the Pyramids
NMC1420H	Selected Topics in Near Eastern Archaeology
NMC1421H	Seminar in Egyptian Archaeology I
NMC1422H	Seminar in Egyptian Archaeology II
NMC1423H	Ancient Iraq
NMC1424H	The Art and Archaeology of Syria
NMC1425H	Mesopotamian Material Culture — Art versus Artifact
NMC1426H	Sacred or Secular Space — Mesopotamian Architecture in Context
NMC1427H	Archaeology of State Societies
NMC1430H	Warfare — The Archaeology of Conflict
NMC1500Y	Archaeology, from Alexander to Muhammad

Hebrew Language and Literature

NMC1306H	Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC1307H	History of Ancient Israel
NMC1308H	Readings in Hebrew Bible
NMC1310H	Readings in Second Temple Period Texts
NMC1313H	Mishnah and Tosefta
NMC1314H	Law in Ancient Judaism
NMC1315H	Advanced Readings in the Dead Sea Scrolls
NMC1316H	Modern Hebrew Poetry
NMC1317H	Modern Hebrew Prose
NMC1318H	Midreshei Halakha: Purity and Cultic Texts
NMC1327H	Themes in Midreshic Literature
NMC1328H	Intertextuality: Tannaitic and Amoaric Literature
NMC1330H	Introduction to Modern Hebrew I
NMC1331H	Introduction to Modern Hebrew II
NMC1332H	Intermediate Modern Hebrew I
NMC1333H	Intermediate Modern Hebrew II
NMC1334H	Advanced Modern Hebrew I
NMC1335H	Advanced Modern Hebrew II
NMC1336H	Modern Academic Hebrew

History

NMC1010H	Mesopotamian Society and Economy
NMC1020H	Ancient Mesopotamia I: Sumerians and Akkadians
NMC1021H	Ancient Mesopotamia II: Assyrians and Babylonians
NMC1022H	The Babylonian City
NMC1023H	The Neo-Assyrian Empire
NMC2080H	Theory and Method in Middle Eastern Studies
NMC2081H	Anthropology of the Middle East
NMC2090Y	The Prophet and the Caliphates: Early Islamic History to 1258
NMC2117H	Readings in Medieval Arabic Chronicles
NMC2119H	Readings in Medieval Arabic Documents
NMC2129H	Arabic Manuscript Studies (prerequisite: NMC2101Y or NML211Y or equivalent)
NMC2170H	Topics in Modern Arab History I
NMC2171H	Topics in Modern Arab History II
NMC2172H	The Politics of Archaeology in the Modern Middle East
NMC2173H	Intellectuals of the Modern Arab World
NMC2180H	Iranian Modernity
NMC2225Y	History of Iran: From the Sasanians to the Safavids
NMC2226H	Medieval Persian Historiography and Diplomatics
NMC2230H	The First World Empire: The Achaemenids
NMC2231H	Alexander and Iran
NMC2232H	Iran After Alexander: From the Seleucids to the Parthians
NMC2310Y	Ottoman History to 1800
NMC2315Y	Topics in Ottoman History
NMC2345Y	The Steppe Frontier in Eurasian and Islamic History

Islamic Art and Material Culture

NMC2541Y	Contextualizing Medieval Middle Eastern and Islamic Pottery

Topics in Law and Religion

NMC1605H	Special Topics in Comparative Religious Law
NMC1608H	Gender Issues in Jewish Law

Linguistics

NMC1651H	Phoenician and Punic Epigraphy
NMC1653H	Issues in Ancient Hebrew Philology
NMC1654H	Advanced Ancient Hebrew Grammar
NMC1655H	Comparative Semitics

Persian Studies

NMC2200Y	Introductory Persian
NMC2201Y	Intermediate Persian
NMC2202H	Modern Persian Poetry (prerequisite: NMC2201Y)
NMC2203H	Structural Development of Iranian Language (prerequisite: NMC2201Y)

NMC2204Y	Avestan
NMC2205Y	Middle Persian (Pahlavi)
NMC2206Y	Old Persian
NMC2219H	Persian Literature: The Epic Tradition
NMC2220H	Persian Literature: Ethical, Erotic, Mystical
NMC2221H	Persian Mirrors for Princes
NMC2224H	The Visionary Tales of Suhravardi, Master of Illuminationist Philosophy
NMC2225Y	History of Iran: From the Sasanians to the Safavids
NMC2227H	Zoroastrian Cosmic History: From Genesis to Universal Judgment
NMC2228H	Zoroastrian Apocalyptic Literature: To the Netherworld and Beyond
NMC2229H	Persians, Greeks, and Romans: Friendly Enemies

Religion and Philosophy

NMC1613Y	Ancient Near Eastern Religion (PhD students in Near and Middle Eastern Civilizations excluded)
NMC1614Y	Ancient Egyptian Religion (PhD students in Near and Middle Eastern Civilizations excluded)
NMC2045Y	Islamic Philosophical Texts
NMC2052H	Islamic Religious Thought
NMC2055H	The Qur'an and Its Interpretation
NMC2056H	Readings in Qur'an and Tafsir

Turkish and Ottoman Studies

NMC2300Y	Introductory Turkish
NMC2301Y	Intermediate Turkish
NMC2330Y	Readings in Ottoman Historical Texts
NMC2331Y	Ottoman Palaeography and Diplomatics
NMC2340Y	Studies in Ottoman and Turkish Literature
JNE2320H	Modern Turkey

Other Courses

NMC2000H	Directed Reading
NMC2000Y	Directed Reading
NMC2001H	Directed Reading and Research
NMC2001Y	Directed Reading and Research

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

Tourangeau, Ann - BScN, MN, PhD ***(Associate Dean, Academic)***
Widger, Kimberley - BScN, MN, PhD
Wright, Amy - BScN, MSc, PhD

Members Emeriti

Donner, Gail - PhD
Gallop, Ruth - BSN, MSN, PhD
Pringle, Dorothy - BScN, MS, PhD
Watt-Watson, Judith - BSN, MSN, PhD

Associate Members

Abbass Dick, Jennifer - BSc, MN, PhD
Acorn, Michelle - BSN, MN, PhD
Andrews, Martine - MN, PhD
Ballantyne, Marilyn - MHSc, PhD
Bedard, Philippe - BA, MD
Chenier-Hogan, Nicole - MSc
Chernenko, Susan - BN, MN
Colella, Tracey J.F. - MSc, PhD
Godkin, Dianne - BScN, MN, PhD
Hardie, Catherine - BSN, MSN, EdD
Howell, Doris - BNSc, MSN, PhD
Hubley, Pam - MSN
Husain, Nusrat - MPH, MD
Innis, Jennifer - MA, MA, PhD
Janes, Nadine - BScN, MSc, PhD
Jeffs, Lianne - MSN, PhD
Joolaee, Soodabeh - BNSc, MSc, PhD
Keilty, Krista - BN, MN, PhD
Kim, Raymond - MD
Kirenko, Willi - BScN, MSN
Knechtel, Leasa - BScN, MN
Lam, Ray - MEd
Lok, Jana - BSc, BScN, MN, PhD
Louis, Joanne - BSN, MS, MN
MacIver, Jane - PhD
McCleary, Lynn - BSc, MSc, DPhil
Mednikov Shcharinsky, Alina - MN
Mehta, Sangeeta - MD
Mohammed, Shan - BScN, BSc, MN, PhD
Narayanan, Unni - MSc, MD
Rose, Louise - BN, MN, PhD
Simmonds, Anne - BScN, MN, PhD
Steele, Rose - PhD
Thomson, Heather - BN, MN, PhD
Thomson, Nadia - BScN, MN
Trip, Katherine - BScN, BScN, MN, MN
Velonis, Alisa Joy - PhD
Wilson, Jean - BScN, MHSc
Wong, David - MD

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

Nursing Science: Nursing Science DN

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. An interview may be required.

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

Nursing Science: Nursing Science PhD

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.

- For further information about admissions, please contact the Graduate Department of Nursing Science.

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)*
  - NUR1117H *Advanced Health Assessment and Therapeutic Management (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

NUR1016H	Health Systems, Policy, and the Profession
NUR1021H	Nursing Ethics
NUR1024H	Foundations of Qualitative Inquiry
NUR1025H	Doing Qualitative Research: Design and Data Collection
NUR1027H	Integrated Approaches to Research Appraisal and Utilization Part 1
NUR1030H	Principles of Leadership and Advanced Clinical Practice in Emergency Preparedness
NUR1036H	Advanced Nursing Practice in Oncology
NUR1038H	Social Determinants of Health in a Global Context
NUR1040H	Issues in Women's Health Care
NUR1045H	Theories of Pain: Impact on the Individual, Family, and Society
NUR1046H	Persistent Illness: Theoretical, Research, and Practice Implications

NUR1047H	Community Participation and Health
NUR1050H	Coping With Illness
NUR1057H	Interventions to Enhance Health, Abilities, and Well-being
NUR1059H	Technology, Digital Health, and Informatics for Advanced Practice Nursing
NUR1062H	Measuring Nursing Care Effectiveness: Economic and Financial Perspectives
NUR1067H	Mental Health Topics in Advanced Practice Nursing
NUR1074H	Facilitating Learning: Nursing Perspectives
NUR1075H	Introductory Statistics for Health Sciences Research
NUR1076H	Intermediate Statistics for Health Sciences Research
NUR1077H	Implementation Science in Healthcare (Prerequisite: NUR1027H or equivalent)
NUR1079Y	Research Methods for Knowledge Discovery
NUR1081Y	PhD Student/Faculty Seminars
NUR1083H	Comparative Politics of Health Policy in Globalizing World
NUR1085H	Topics in Critical Perspectives in Health and Health Care
NUR1086H	Nursing Health Services Research Methods
NUR1087H	Foundations of Clinical Research
NUR1094H	Research Design, Appraisal, and Utilization: Nurse Practitioner
NUR1095H	Introduction to Qualitative Research: Methodologies, Appraisal, and Knowledge Translation: Nurse Practitioner
NUR1097H	Program Planning and Evaluation in Nursing: Nurse Practitioner (Prerequisite: NUR1094H)
NUR1101H	Advanced Health Assessment and Clinical Reasoning (Adult) (Prerequisite: NUR1140H and NUR1141H)
NUR1102H	Advanced Health Assessment and Clinical Reasoning (Paediatric) (Prerequisite: NUR1144H and NUR1145H)
NUR1114H	Advanced Health Assessment and Clinical Reasoning (Primary Health Care — Global Health) (Prerequisite: NUR1142H and NUR1143H)
NUR1115H	Advanced Health Assessment and Therapeutic Management (Adult) 1 (Prerequisites: NUR1101H, NUR1140H, NUR1141H)
NUR1116H	Advanced Health Assessment and Therapeutic Management (Paediatric) 1 (Prerequisites: NUR1102H, NUR1144H, NUR1145H)
NUR1117H	Advanced Health Assessment and Therapeutic Management (Primary Health Care — Global Health) 1 (Prerequisites: NUR1114H, NUR1142H, NUR1143H)
NUR1127H	Integrated Approaches to Research Appraisal and Utilization Part 2 (Prerequisite: NUR1027H)
NUR1138H	Global Health Topics for Nurse Practitioners
NUR1140H	Pathophysiology and Pharmacotherapeutics 1 (Adult)
NUR1141H	Pathophysiology and Pharmacotherapeutics 2 (Adult)
NUR1142H	Pathophysiology and Pharmacotherapeutics 1 (Primary Health Care — Global Health)
NUR1143H	Pathophysiology and Pharmacotherapeutics 2 (Primary Health Care — Global Health)
NUR1144H	Pathophysiology and Pharmacotherapeutics 1 (Paediatric)
NUR1145H	Pathophysiology and Pharmacotherapeutics 2 (Paediatric)
NUR1151H	Theories and Concepts in Nursing Leadership and Administration
NUR1152H	Leading and Managing Effective Health Care Teams
NUR1156H	History of Ideas in Nursing Practice: Health Systems Leadership and Administration
NUR1157H	Program Planning and Evaluation in Nursing: Health Systems Leadership and Administration (Prerequisite: NUR1027H)
NUR1161H	Advanced Concepts in Leadership and Administration (Prerequisites: NUR1151H, NUR1152H)
NUR1169Y	Advanced Nursing Practice Scholarship: Health Systems Leadership and Administration
NUR1170H	Introduction to Advanced Practice Nursing
NUR1171H	Topics in Advanced Practice Nursing
NUR1174H	Research Design, Appraisal, and Utilization: Clinical
NUR1175H	Introduction to Qualitative Research: Methodologies, Appraisal, and Knowledge Translation: Clinical
NUR1176H	History of Ideas in Nursing Practice: Clinical
NUR1177H	Program Planning and Evaluation in Nursing: Clinical (Prerequisite: NUR1174H)
NUR1179H	Advanced Nursing Practice Scholarship: Clinical

NUR1215H	Advanced Health Assessment and Therapeutic Management (Adult) 2 (Prerequisites: NUR1101H, NUR1115H, NUR1140H, NUR1141H)
NUR1216H	Advanced Health Assessment and Therapeutic Management (Paediatric) 2 (Prerequisites: NUR1102H, NUR1116H, NUR1144H, NUR1145H)
NUR1217H	Advanced Health Assessment and Therapeutic Management (PHC GH) 2 (Prerequisites: NUR1114H, NUR1117H, NUR1142H, NUR1143H)
NUR1221Y	Nurse Practitioners: Roles and Issues (Adult) (Prerequisites: NUR1101H, NUR1115H, NUR1140H, NUR1141H, NUR1215H)
NUR1222Y	Nurse Practitioners: Roles and Issues (Paediatric) (Prerequisites: NUR1102H, NUR1116H, NUR1144H, NUR1145H, NUR1216H)
NUR1223Y	Nurse Practitioners: Roles and Issues (Primary Health Care — Global Health) (Prerequisites: NUR1114H, NUR1117H, NUR1142H, NUR1143H, NUR1217H)
NUR1301H	Leadership: Health Services and Education
NUR1302H	Implementation Science: Health Services and Education
NUR1303H	Policy and Politics in Nursing Practice and Education
NUR1311H	DN Seminar 1 (Credit/No Credit)
NUR1312H	DN Seminar 2 (Credit/No Credit; prerequisite: NUR1311H)
NUR1313H	DN Seminar 3 (Credit/No Credit; prerequisite: NUR1312H)
NUR1314H	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.)
NUR1331H	Analysis and Application of Individual and Population Health Data
NUR1332H	Informatics and Technologies for Practice Advancement
NUR1333H	Equity and Ethics in Healthcare Leadership
NUR1334H	Quality Improvement, Safety, and Evaluation Science
NUR1335H	The Scholarship of Teaching and Learning in Healthcare Practice and Education

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
  - Nutritional Sciences, MSc, PhD
- Indigenous Health
  - Nutritional Sciences, MSc, PhD
- Public Health Policy
  - Nutritional Sciences, MSc, PhD
- Women's Health
  - Nutritional Sciences, MSc, PhD
- Toxicology
  - 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

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Email: grad.nutrisci@utoronto.ca
Telephone: (416) 978-6071
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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
Bhutta, 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. Venketeshwer - 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 - BScN
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

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).
- 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 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* (1.0 FCE)
  - 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.

NFS1201H	Public Health Nutrition
NFS1204Y[0]	Master's Seminars in Nutritional Sciences (Credit/No Credit)
NFS1208H	Foundations of Practice I

NFS1209Y	Foundations of Practice II
NFS1210H	Foundations of Practice III
NFS1211H	Community Nutrition
NFS1212H	Regulation of Food Composition, Health Claims, and Safety
NFS1216H	Selected Topics in Nutrition
NFS1218H	Recent Advances in Nutritional Sciences I
NFS1220H	Clinical Nutrition
NFS1221H	Nutrition Programs and Strategies
NFS1222H	Recent Advances in Nutritional Sciences II: Diet and Cardiovascular
NFS1223H	Dietary Carbohydrate and Glycaemic Index in Health and Disease
NFS1224H	Nutritional Epidemiology
NFS1225H	Nutrition and Metabolism for Public Health Nutrition Professionals
NFS1226H	Nutrition and Cancer
NFS1301H	Directed Reading in Nutritional Sciences
NFS1304Y[0]	Doctoral Seminars in Nutritional Sciences (Credit/No Credit)
NFS1484H	Advanced Nutrition

[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

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Telephone: (416) 946-8571
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University of Toronto
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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 - BOTh, 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
Davids-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
Hitzig, 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
Markoulakis, 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, resumé, 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 OCT1220Y0.
- 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

+ 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.

Occupational Science and Occupational Therapy: Occupational Therapy MScOT Courses

Required Courses for the 24-Month Full-Time Option

OCT1100H0	Applied Skills and Technology: Human Factors and Design in Occupational Therapy
OCT1111Y	Occupational Science: Foundations for Occupational Therapy
OCT1122Y+	Research Approaches and Methods in Occupational Therapy
OCT1131H	Occupational Therapy Practice I
OCT1132H	Occupational Therapy Practice II
OCT1141H	Assessment in Occupational Therapy
OCT1152Y	Musculo-Skeletal Foundations for Occupational Therapy Practice
OCT1162Y	Mental Health Foundations for Occupational Therapy Practice
OCT1172Y+	Neurological Foundations for Occupational Therapy Practice
OCT1183Y	Occupational Therapy Fieldwork I
OCT1190Y0	Building Practice Through Mentorship
OCT1193H	Enabling Occupation Across the Life Course
OCT1220Y0 (1.5 FCEs)	Graduate Research Project
OCT1233H	Occupational Therapy Practice III
OCT1236H	Transition to Occupational Therapy Practice
OCT1251H	Enabling Occupation with Children: Part I
OCT1252H	Enabling Occupation with Children: Part II
OCT1261H	Enabling Occupation with Adults: Part I
OCT1262Y	Enabling Occupation with Adults: Part II
OCT1271H	Enabling Occupation with Older Adults: Part I
OCT1272H	Enabling Occupation with Older Adults: Part II
OCT1281Y	Occupational Therapy Fieldwork II
OCT1282Y+	Occupational Therapy Fieldwork III
OCT1283Y	Occupational Therapy Fieldwork IV

Required Courses for the 12-Month, Advanced-Standing Part-Time Option

OCT1111Y	Occupational Science: Foundations for Occupational Therapy
OCT1122Y[+]	Research Approaches and Methods in Occupational Therapy
OCT1220Y[0]	Graduate Research Project (1.5 FCEs)

[0] 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)***

Dupuis, Lee - BSc, BScPhm, MPharm, PhD
Gomes, Tara - BSc, MHSc
Grootendorst, Paul - BA, MEc, PhD
Hampson, David - PhD
Heerklotz, Heiko - PhD
Henderson, Jeffrey - PhD
Ito, Shinya - MD, BM
Kelley, Shana - BA, PhD (***Director, Next-Generation Precision Medicine***)
Kohler, Jillian - BA, MA, PhD (***Director, WHO CC for Governance, Accountability and Transparency in the Pharmaceutical Sector***)
Kotra, Lakshmi - BSc, BPhm, PhD, PhD
Krahn, Murray - BA, MSc, MD
Lee, Ping - BSChE, PhD
Macgregor, Robert - BS, PhD
MacKeigan, Linda - BScPhm, PhD
McCarthy, Lisa - BScPhm, MSc, DP
Pang, Sandy - BSc, PhD
Papadimitropoulos, Emmanuel - BSc, BSP, MScPhm, PhD
Pardee, Keith Ian - PhD
Pennefather, Peter - BSc, PhD
Piquette-Miller, Micheline - BScPhm, PhD
Reilly, Raymond - BSc, BSc, MSc, PhD ***(Director, Centre for Pharmaceutical Oncology)***
Taddio, Anna - BScPhm, MScPhm, PhD
Thompson, Alison - BA, MA, PhD
Uetrecht, Jack - BSc, MSc, MD, PhD
Walker, Scott - BScPhm, MScPhm
Weaver, Donald F - BSc, MD, PhD
Wells, James - BSc, MSc, PhD
Wells, Peter - BScPhm, DP
Wong, William Wai Lun - BSc, MCS, PhD
Wu, Shirley X.Y. - PhD

Members Emeriti

Bowen, Barry - BScPhm, MScPhm

Associate Members

Chen, Eric - MD
Chit, Ayman - DP
Crown, Natalie - BScPhm, DP, DP
De Lannoy, Ines A.M. - BScPhm, PhD
Dubins, David - BSc, PhD
Facey, Marcia - PhD
Franck, Linda - BSN, MS, PhD
Hoch, Jeffrey - BA, MA, PhD
Kanfer, Isadore - BScPhm, BSc, PhD
Lexchin, Joel - BSc, MSc, MD
MacLeod, Anna - BA, BEd, MEd, PhD
McMurtry, Meghan - PhD
Paradis, Elise - BA, MA, MA, PhD, PhD
Poda, Gennadiy - MSc, PhD
Rochon, Paula - MD
Routy, Jean-Pierre - MD
Seto, Winnie - BScPhm, MSc, DP
Sun, Hong-Shuo - MSc, DrMed, DPhil
Tseng, Alice - BScPhm, DP

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

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.

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.

- 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:

    - 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 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.
- 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 (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.

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.
- A letter of support from the employer.
- The departmental admissions committee reviews the applications; admission is highly selective with preference given to applicants who are members in good standing of a regulated profession or scientific society.

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 fulfil 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

Pharmaceutical Sciences: Pharmaceutical Sciences MSc, PhD Courses

Please consult the department's timetable for courses offered in a given year.

PHM1107H	Advanced Pharmacokinetics Course I
PHM1109H	Recent Developments in Dosage Form Design (prerequisite: PHM224Y or equivalent)
PHM1115H	Special Topics in Radiopharmaceuticals II
PHM1130H	Biomolecular Interactions and Thermodynamics I
PHM1133H	Special Topics in Pharmaceutical Sciences Reading Course
PHM1135H	Nanomedicines in Oncology
PHM1136H	Introduction to Biostatistics
PHM1137H	Introduction to Qualitative Research Methods in the Health Sciences
PHM1138H	Electronics for Pharmaceutics Applications
PHM1139H	Diagnosing Corruption in the Health Sector and Anti-Corruption Policies and Tools
PHM1140H	Principles of Synthetic Biology
PHM2100H (0.25 FCE)	Pharmaceutical Sciences Module: Sciences in New Drugs and Biologics
PHM2101H (0.25 FCE)	Pharmaceutical Sciences Module: Precision in Vitro Diagnostics
PHM2102H (0.25 FCE)	Pharmaceutical Sciences Module: Introduction to Fundamentals of Drug Discovery Process
JFK1122H	Drug Transport Across Biological Membranes
JNP1014Y	Interdisciplinary Toxicology
JNP1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP1018H[+]	Molecular and Biochemical Basis of Toxicology
JRH1000H	Introduction to Pharmacoepidemiology
JRH5124H	Public Health Ethics
PAS3700H	Multidisciplinary Aspects of Addictions
PCL1004Y	Clinical Pharmacology
PPG2010H	Panel Data Methods for Public Policy Analysis

[+] *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

PHM1141H	Introduction to Education Theory, Practice, and Scholarship
PHM1142H	Methods for Patient-Focused and Pharmacy Practice Research
PHM1143H	Advanced Pharmacy Practice Leadership

Practica and Research Project

PHM8000Y[0]	MScPhm Clinical Practicum I (Credit/No Credit; 1.5 FCEs.)
PHM8100Y[0]	MScPhm Clinical Practicum II (Credit/No Credit; 1.5 FCEs.) (Prerequisite: PHM8000Y, which may be taken concurrently.)
PHM9000Y[0]	MScPhm Research Practicum (Credit/No Credit. 3.0 FCEs.) (Prerequisite: PHM1142H, which may be taken concurrently.)

Elective Courses

PHM1107H	Advanced Pharmacokinetics Course I
PHM1115H	Special Topics in Radiopharmaceuticals II
PHM1133H	Special Topics in Pharmaceutical Sciences Reading Course
PHM1135H	Nanomedicines in Oncology
PHM1136H	Introduction to Biostatistics
PHM1137H	Introduction to Qualitative Research Methods in the Health Sciences
PHM1138H	Electronics for Pharmaceutics Applications
AGE2000H	Principles of Aging
HAD5746H	Applied Health Econometrics II
JNP1014Y	Interdisciplinary Toxicology
JRH1000H	Introduction to Pharmacoepidemiology
JRH5124H	Public Health Ethics
PAS3700H	Multidisciplinary Aspects of Addictions
PCL1004Y	Clinical Pharmacology

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
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

Schimmer, Bernard - BS, PhD
Sibille, Etienne - BSc, PhD
Snead III, Carter - BS, MD, MD
Swardfager, Walter - PhD
Tyndale, Rachel - PhD
Uetrecht, Jack - BSc, MSc, MD, PhD
Wells, James - BSc, MSc, PhD
Wells, Peter - BScPhm, DP
Wong, Albert - MD, PhD
Woo, Minna - MD
Young, Trevor - MSc, MD, PhD
Yu, Haung - PhD
Zawertailo, Laurie Anne - PhD

Members Emeriti

Burnham, Willets - PhD
Kalant, Harold - BSc, MD, PhD
Okey, Allan - BSc, MSc, PhD
Pace-Asciak, Cecil - PhD
Warsh, Jerry - MD

Associate Members

Arnot, Michelle - PhD
Barsyte-Lovejoy, Dalia - PhD
Di Ciano, Patricia - PhD
Finkelstein, Yaron - MD
Hamadanizadeh, Anita - PhD
Hassan, Ahmed - MBBS
Laposa, Rebecca - PhD
Shram, Megan - PhD
Sloan, Matthew - MSc, MD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Vedadi, Masoud - PhD
Woodland, Cindy - 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[0] *Applied Skills in Clinical Pharmacology*
  - PCL1101H[0] *Technology, Techniques, and Translation in Pharmacology and Toxicology*
  - PCL1402H *Pharmacology and Toxicology in Drug Development*
  - PCL1491H *Clinical Pharmacology: Principles in Practice*
  - PCL2200Y[0] *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[0] *Practicum in Clinical Pharmacology* (Credit/No Credit; 2.0 FCEs)
  - PCL2101Y[0] *Practicum in Clinical Pharmacology I* (Credit/No Credit)
  - PCL2102Y[0] *Practicum in Clinical Pharmacology II* (Credit/No Credit)
  - PCL2201Y[0] *Research Project Extended Study* (Credit/No Credit)
  - APS1001H *Project Management*
  - CHL5201H *Biostatistics I*
  - JNP1014Y *Interdisciplinary Toxicology*
  - JPM1005Y *Behavioural Pharmacology*
  - RSM2017H *Pharmaceutical Strategy.*

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

[0] Course that may continue over a program. The course is graded when completed, or credit is given when the course is completed.

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[0] *Applied Skills in Clinical Pharmacology* (0.5 FCE)
- PCL2200Y[0] *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[0] *Technology, Techniques, and Translation in Pharmacology and Toxicology*

- PCL1300H *Selected Topics in Clinical Pharmacology and Toxicology* (Credit/No Credit)
- CHL5201H *Biostatistics I* (exclusion: LMP1407H)
- JNP1014Y *Interdisciplinary Toxicology*
- JPM1005Y *Behavioural Pharmacology*

- Note: students participating in this advanced-standing option are not eligible to enrol in a practicum course.

Program Length

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

Time Limit

3 years

[0] Course that may continue over a program. The course is graded when completed.

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)
  - PCL1003Y[0] *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 PCL1003Y[0] *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.

PCL1001Y	Systems Pharmacology
PCL1002Y	Graduate Pharmacology
PCL1003Y[0]	Seminars in Pharmacology (Credit/No Credit)
PCL1004Y	Clinical Pharmacology
PCL1100H[0]	Applied Skills in Clinical Pharmacology
PCL1101H[0]	Technology, Techniques, and Translation in Pharmacology and Toxicology
PCL1110H	Applied Skills in Clinical Pharmacology
PCL1300H	Selected Topics in Clinical Pharmacology and Toxicology (Credit/No Credit)
PCL1402H	Pharmacology and Toxicology in Drug Development
PCL1491H	Clinical Pharmacology: Principles in Practice (co-requisite: PCL1004Y or prior pharmacokinetics course)
PCL2100Y[0]	Practicum in Clinical Pharmacology (Credit/No Credit; 2.0 FCEs) (prerequisite: PCL1100H[0])
PCL2101Y[0]	Practicum in Clinical Pharmacology I (Credit/No Credit) (prerequisite: PCL1100H[0])
PCL2102Y[0]	Practicum in Clinical Pharmacology II (Credit/No Credit) (prerequisite: PCL1100H[0])
PCL2200Y[0]	Major Research Project (prerequisite or co-requisite: PCL1100H[0])
PCL2201Y[0]	Research Project Extended Study (Credit/No Credit) (prerequisite: PCL2200Y[0])
CHL5201H	Biostatistics I (exclusion: LMP1407H)
JFK1121H	Selected Topics in Drug Development II
JFK1122H	Drug Transport Across Biological Membranes
JNP1014Y	Interdisciplinary Toxicology
JNP1016H	Graduate Seminar in Toxicology (prerequisite or co-requisite: JNP1014Y)
JNP1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JPM1005Y	Behavioural Pharmacology
JYG1555H	Advanced Topics: Cellular and Molecular Neurobiology

[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 - AB, 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
Hellie, 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

Morgan, Kathryn - BA, MA, MEd, PhD
Morrison, Margaret - BA, MA, PhD
Mullin, Amy - BA, PhD
Nagel, Jennifer - BA, MA, PhD
Pickavé, Martin - MA, PhD
Raffman, Diana - BA, PhD, FRSC
Rattan, Gurpreet - BSc, AM, MPH, PhD ***(Graduate Director)***
Ripstein, Arthur S. - BA, MA, LLM, PhD, Howard Beck, Q.C. Chair
Rosenthal, Michael - PhD
Rozemond, Marleen - BA, PhD
Seager, William Edward - BA, MA, PhD
Sedivy, Sonia - BA, PhD
Sepielli, Andrew - AB, JD, PhD
Stang, Nicholas - AB, PhD
Tenenbaum, Sergio - MA, PhD
Walsh, Denis - BA, BSc, MPH, PhD, PhD
Weisberg, Jonathan - BMath, BPhil, PhD
Wilson, Jessica Marie - BA, PhD
Yi, Byeong-Uk - BA, MA, MA, PhD

Members Emeriti

De Sousa, Ronald - BA, PhD, FRSC
Goldstick, Daniel - BA, BPhil, DPhil
Hacking, Ian - BA, 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
Teitel, 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.
  - 1.0 FCE in the history of science from the following courses: HPS2000H, HPS2001H, HPS2003H, HPS2004H, HPS2008H, HPS2009H.
  - 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:

- 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

- **Course Requirements**
  - Students must complete a minimum of 3.0 FCEs in philosophy, with a minimum A– average by the end of Year 1 including:
  - At least 1.0 FCE which must comprise courses from philosophical traditions from different geographical regions and/or different historical periods.
  - At least 1.0 FCE 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.
- **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 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.
  - 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:
  - 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 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 writing 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.
  - 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 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 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 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
PHL2002H	Plato
PHL2003H	Aristotle
PHL2005H	Seminar in Plato
PHL2007H	Seminar in Aristotle
PHL2009H	Seminar in Greek Philosophy
PHL2010H	Late Greek Philosophy
PHL2011H	Seminar in Hellenistic 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

PHL2076H	Hegel
PHL2078H	Kierkegaard
PHL2079H	Marxist Philosophy
PHL2084H	Seminar in Nineteenth-Century Continental Philosophy
PHL2085H	Husserl
PHL2089H	Seminar in Twentieth-Century Continental Philosophy
PHL2090H	Hermeneutics
PHL2091H	The Critical Theory of Society
PHL2092H	Pragmatism
PHL2093H	Frege
PHL2094H	Russell
PHL2095H	Wittgenstein
PHL2096H	Early Analytic Philosophy
PHL2097H	Later Analytic Philosophy
PHL2192H	Seminar in Analytic Philosophy
PHL2193H	Topics in Analytic Philosophy

History and Philosophy of Science and Technology

For MA students in the Philosophy of Science concentration.

HPS2000H	History of Mathematics
HPS2001H	History of Physics
HPS2003H	History of Biology
HPS2004H	History of Medicine
HPS2008H	History of Psychology
HPS2009H	History and Philosophy of the Social Sciences

Problems of Philosophy

Metaphysics and Epistemology

PHL2101H	Seminar in Metaphysics
PHL2105H	Topics in Metaphysics
PHL2111H	Seminar in Epistemology
PHL2115H	Topics in Epistemology
PHL2117H	Formal Epistemology
PHL2119H	Philosophical Foundations of Multidisciplinary Studies
PHL2171H	Philosophy of Mind
PHL2172H	Seminar in Philosophy of Mind
PHL2175H	Philosophy of Perception
PHL2181H	Philosophy of Religion

Logic and the Philosophy of Language

PHL2120H	Introductory Mathematical Logic
PHL2122H	Advanced Logic
PHL2124H	Seminar in Logic
PHL2125H	Many Valued and Modal Logics
PHL2126H	Philosophy of Logic
PHL2127H	Philosophy of Mathematics
PHL2128H	Decision and Game Theory
PHL2130H	Topics in Informal Logic
PHL2137H	Philosophy of Action
PHL2190H	Philosophy of Language
PHL2191H	Seminar in the Philosophy of Language
PHL2197H	Foundations of Computation and Information

Value Theory

PHL2131H	Ethics
PHL2132H	Seminar in Ethics
PHL2133H	Topics in Ethics
PHL2135H	Metaethics
PHL2141H	Political Philosophy
PHL2142H	Seminar in Political Philosophy
PHL2143H	Social Philosophy
PHL2144H	Seminar in Social Philosophy
PHL2145H	Bioethics
PHL2146Y	Topics in Bioethics
PHL2148H	Philosophy of Law
JPL2149H	Legal Theory
PHL2151H	Aesthetics
PHL2152H	Philosophy and Teaching

Philosophy of Science

JPH2194H	Topics in the History of the Philosophy of Science

PHL2195H	Philosophy of Biology
PHL2196H	Topics in the Philosophy of Science
PHL2198H	Advanced Introduction to the Philosophy of Science
PHL2199H	Seminar in the Philosophy of Science
PHL2200H	Philosophy of Physics

Miscellaneous

PHL3101H	Intensive Special Course
PHL4900H	Research Seminar

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
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, MASc, PhD
Andrade, Maydianne - BSc, MS, PhD
Archontitsis, Georgios - BSc, MSc, PhD ***(Chair and Graduate Chair)***
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

Edwards, Elizabeth - BEng, PhD
Evans, Greg - PhD
Eyles, Nicholas - BSc, MSc, PhD, DSc
Finkelstein, Sarah - AB, MPH, PhD
Fulthorpe, Roberta - BSc, MSc, PhD
Gough, William - BSc, MSc, PhD ***(Vice-Principal, Academic and Dean)***
He, Yuhong - PhD
Hoffmann, Matthew - BSc, PhD
Howard, Ken - BSc, MSc, PhD
Isaac, Marney Elizabeth - BS, MES, PhD
Izmaylov, Artur - PhD
Jackson, Donald - BSc, MSc, PhD
Kerman, Kagan - BScPhm, MSc, ScD
Klenk, Nicole - BS, MSc, PhD
Kraatz, Heinz-Bernhard - BA, MC, PhD
Kronzucker, Herbert - PhD
Lovejoy, Nathan Richard - BSc, MS, PhD
MacIvor, Scott - BSc, MSc, PhD
Malcolm, Jay - BSc, MSc, PhD
Martin, Adam - BA, MF, PhD
Miall, Andrew - BSc, PhD
Mitchell, Carl - PhD ***(Graduate Associate Chair)***
Murphy, Jennifer - BCh, DChem
Rochman, Chelsea - BS, PhD
Sherwood Lollar, Barbara - PhD
Short, Steven - BSc, PhD
Siegel, Jeffrey Alexander - BS, MS, PhD
Simpson, Andre - BSc, PhD
Simpson, Myrna - BS, DPhil
Smith, Sandy - BAgrSc, MSc, PhD
Strong, Kimberly - PhD
Terebiznik, Mauricio - BSc, PhD
Tozer, Laura Molly - BSc, MA, PhD
Tsuji, Leonard - BSc, DDS, PhD
Vanlerberghe, Greg - BSc, MSc, PhD
Voznyy, Oleksandr - BSc, MSc, PhD
Wang, Yan - BSc, MSc, PhD
Wania, Frank - MPH, PhD
Wells, Mathew - BS, DPhil
Wortmann, Ulrich - BSc, MSc, PhD
Zhang, Xiaoan - MS, PhD

Associate Members

Arnot, Jon - BS, MES, PhD
Bailey, Sarah - BSc, PhD
Bhavsar, Satyendrakumar - BE, PhD
Dalili, Shadi - MSc, PhD
Daxberger, Heidi - PhD
Dunlop, Erin - BSc, PhD
Emilson, Erik - BSc, MSc, PhD
Hadzovic, Alen - BSc, PhD
Harner, Tom - BChe, ME, DrEng
Helm, Paul - BSc, MASc, DChem
Hung, Hayley - BChe, MS, PhD
Koops, Marten - BSc, MSc, PhD
Latulippe, Nicole Monique - BA, MA, PhD
Livingstone, Stuart - BS, PhD
Mackereth, Rob - BSc, MSc, PhD
MacLellan, James - BA, MS, DPhil
Mandrak, Nicholas - BSc, MSc, PhD
Meriano, Mandana - ScD
Mikhaylichenko, Svetlana - MSc, DChem
Mirza, Monirul - BSE, MEng, PhD
Palmer, Michelle - BSc, MSc, PhD
Sauer, Effiette - BS, PhD
Smith, Karen Louise - BSc, MASc, MASc, PhD
Steffen, Alexandra - BSc, MSc
Weaver, Dan - BSc, MS, PhD
Weyl, Olaf - PhD
Wilson, Kathleen - AB, AM, PhD
Yerubandi, Ram - MTech, PhD
Young, Joelle - BSc, MA, PhD
Zhu, Jiping - BS, MSc, DSc

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 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 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: 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.

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.

EES1100H	Advanced Seminar in Environmental Science
EES1101Y	Research Paper in Environmental Science
EES1102H	Analytical Chemistry for Geoscientists
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
EES1108H	Environmental Science Field Camp
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
EES1114H	Directed Readings in Environmental Science I
EES1115H	Directed Readings in Environmental Science II
EES1116Y	Internship
EES1117H	Climate Change Impact Assessment
EES1118H	Fundamentals of Ecological Modelling
EES1119H	Quantitative Environmental Analysis
EES1120H	Fluid Dynamics of Contaminant Transport
EES1121H	Modelling the Fate of Organic Chemicals in the Environment
EES1122H	Global Environmental Security and Sustainable Development
EES1123H	Environmental Regulations
EES1124H	Environmental Project Management
EES1125H	Contaminated Site Remediation
EES1126H	Hydrology and Watershed Management
EES1127H	Applied Biogeochemistry and Geomicrobiology
EES1128H	Biophysical Interactions in Managed Environments
EES1129H	Brownfields Redevelopment
EES1130H	Ontario BioGeospheres Field Course
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
EES1701H	Environmental Legislation and Policy
EES1704H	Environmental Risk Assessment
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
EES4001H	Internship Training 1 (restricted to students enrolled in one of the approved combined degree programs with the MEnvSc)
EES4003H	Academic Training 1 (restricted to students enrolled in one of the approved combined degree programs with the MEnvSc)

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

EES2200H	Advanced Seminar in Environmental Science

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.

Elective Courses

EES1102H	Analytical Chemistry for Geoscientists
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

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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, MClSc, 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.
  - TOEFL candidates 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 can 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

PHT1101H (0.5 FCE)	Critical Foundations of Physical Therapy
PHT1102Y (3.0 FCEs)	Physical Therapy Practice I
PHT1103Y (3.0 FCEs)	Physical Therapy Practice II
PHT1104Y[+] (3.0 FCEs)	Physical Therapy Practice III
PHT1105Y (0.75 FCE)	Clinical Internship I (Honours/Pass/Fail)
PHT1106H (0.5 FCE)	Advanced Critical Thinking in Physical Therapy
PHT1107H (0.5 FCE)	Scholarly Practice I
PHT1108Y (0.75 FCE)	Clinical Internship II (Honours/Pass/Fail)
PHT1109Y (0.75 FCE)	Clinical Internship III (Honours/Pass/Fail)
PHT1110Y (3.0 FCEs)	Physical Therapy Practice IV
PHT1111H (0.5 FCE)	Selected Topics in Physical Therapy
PHT1112Y (0.75 FCE)	Clinical Internship IV (Honours/Pass/Fail)
PHT1113Y (1.0 FCE)	Scholarly Practice II
PHT1114Y (0.75 FCE)	Clinical Internship V (Honours/Pass/Fail)

[+] *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

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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 - BS, 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
Luke, Michael - BSc, PhD
Marjoribanks, Robin - BSc, MS, MSc, PhD
McMillen, David - BSc, MS, PhD
Menou, Kristen - BSc, MS, ScD
Miller, R.J. Dwayne - BSc, 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
Orr, 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

Vutha, Amar - MSc, PhD
Walker, Kaley - BSc, PhD
Wei, John - PhD
Wells, Mathew - BS, DPhil
Wiebe, Nathan - PhD
Wunch, Debra - BSc, MSc, PhD
Yang, Luyi - BS, MA, PhD
Zilman, Anton - BSc, MSc, PhD

Members Emeriti

Milkereit, Bernd - DrRerNat
West, Gordon - BASc, MA, PhD

Associate Members

Deyirmenjian, Vatche Berj - PhD
Lee, Christopher - BA, PhD
Savaria, Pierre - MSc, 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);
    - 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).
  - **Option 3: Coursework plus MSc Research Thesis:**
    - graduate lecture courses (2.0 FCEs);
    - thesis;
    - selection of the program is made by the student and faculty advisor in consultation with the Associate Chair.
- MSc students are expected to attend the weekly general colloquium conducted by the department.
- The residence requirement is one year, 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 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

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 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.
- Complete **3.0 full-course equivalents (FCEs)**: graduate lecture **courses and a thesis**.
- Students must complete a **qualifying oral examination** within 20 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

PHY1460H	Nonlinear Physics
PHY1483H	Relativity Theory I
PHY1484H	Relativity Theory II
PHY1485H	Laser Physics
PHY1487H	Quantum Theory of Solids I
PHY1489H	Introduction to High Energy Physics
PHY1491H	Current Interpretations of Quantum Mechanics
PHY1492H	Physics of the Earth
PHY1498H	Introduction to Atmospheric Physics

General Courses

PHY1500H	Statistical Mechanics
PHY1510H	Electromagnetism
PHY1520H	Quantum Mechanics
PHY1530H	Fluid Mechanics
PHY1540H	Mathematical Methods in Physics
PHY1600H	Effective Communication for Physicists
PHY1610H	Scientific Computing for Physicists

Specialized Courses

PHY2108H (0.25 FCE)	Special Topics in Physics I
PHY2109H (0.25 FCE)	Special Topics in Physics II
PHY2202H	Atomic and Molecular Physics
PHY2203H	Quantum Optics I
PHY2204H	Quantum Optics II
PHY2205H	Special Topics in Quantum Optics I
PHY2206H	Special Topics in Quantum Optics II
PHY2208H	Nonlinear Optics
PHY2211H	Quantum Information Theory
PHY2212H	Entanglement Physics
PHY2303H	Quantum Theory of Solids II
PHY2313H	Special Topics in Condensed Matter Physics I
PHY2314H	Special Topics in Condensed Matter Physics II
PHY2315H	Advanced Statistical Mechanics
PHY2321H	Many Body Physics I
PHY2322H	Many Body Physics II
PHY2403H	Quantum Field Theory I
PHY2404H	Quantum Field Theory II
PHY2405H	Experimental High Energy Physics
PHY2406H	Special Topics in Particle Physics I
PHY2407H	Special Topics in Particle Physics II
PHY2408H	Phenomenology of the Standard Model
PHY2502H	Climate System Dynamics
PHY2504H	Advanced Atmospheric Dynamics
PHY2505H	Atmospheric Radiative Transfer and Remote Sounding
PHY2506H	Data Assimilation and Retrieval Theory
PHY2509H	Special Topics in Atmospheric Physics I
PHY2510H	Special Topics in Atmospheric Physics II
PHY2603H	Inverse Theory
PHY2609H	Planetary Physics
PHY2706H	Special Topics in Biological Physics
PHY2707H	Cellular and Molecular Biophysics I
PHY2708H	Cellular and Molecular Biophysics II
PHY2709H	Quantitative Biology of Systems, Organisms, and Populations
PHY2710H	Computational Methods in Biophysics
PHY2711H	Biophysical Techniques
JGP4170H	Geotectonics
JPE2605H	Advanced Seismology

Report Course for MSc Students

PHY3400Y+	Selected Topics in Physics

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

Seminar Courses

PHY7001Y+	Atmospheric Physics Seminar
PHY7002Y+	Biophysics Seminar
PHY7003Y+	Condensed Matter Physics Seminar
PHY7004Y+	Geophysics Seminar
PHY7005Y+	Quantum Optics Seminar
PHY7007Y+	Subatomic Physics and Astrophysics Seminar

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

Research Courses

PHY6011Y	Research in Atmospheric Physics
PHY6021Y	Research in Biophysics
PHY6031Y	Research in Condensed Matter Physics
PHY6041Y	Research in Geophysics
PHY6051Y	Research in Quantum Optics
PHY6071Y	Research in Subatomic Physics and Astrophysics

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
  - Physiology, MSc, PhD
- Cardiovascular Sciences
  - Physiology, MSc, PhD
- Developmental Biology
  - Physiology, MSc, PhD
- Neuroscience
  - Physiology, MSc, PhD
- Resuscitation Sciences (admissions have been administratively suspended)
  - 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
Josselyn, 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
Salter, Michael - MD, PhD
Scholey, James - MD
Seed, Mike - MBBS
Seltzer, Se'ev - DMD, BMedSc
Sessle, Barry - BS, MDS, BDS, PhD
Skinner, Frances - PhD
Subbarao, Padmaja - MD
Sugita, Shuzo - PhD
Sun, Hong-Shuo - MSc, DrMed, DPhil
Sweezey, 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, Haibo - 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, Etay - 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[0] *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 MHSc program director.

Program Length

3 sessions full-time (typical registration sequence: 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.

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 PSL1000H[0] *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.

Physiology: Physiology PhD

Doctor of Philosophy

The PhD degree is an advanced research degree. Upon its completion, graduates are expected to function as independent research scientists. Students will complete coursework, attend and give multiple presentations of scientific work, and demonstrate the ability to carry out research of publishable quality as evidenced by a written thesis based on original research and an oral defence of the work. Through this program, students will broaden and deepen their knowledge of physiology and its current scientific literature. They will develop and practise scientific skills of critical thinking, devising research questions, understanding experimental design, techniques, and analysis, and communicating scientific ideas orally and in writing.

Applicants may enter the PhD program via one of three routes: 1) following completion of an appropriate MSc degree; 2) transfer from the University of Toronto MSc program in Physiology; or 3) direct entry after completing a bachelor's degree.

Students may begin or transfer in Fall, Winter, or Summer.

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 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).

- 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

[0] Course that may continue over a program. Credit is given when the course is completed.

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 PSL2000H[0] *PhD Seminars in Physiology* (Credit/No Credit), mandatory for all graduate students in Physiology
  - 0.5 FCE in PSL1066H[0] *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.
- Courses are selected in consultation with the supervisor and/or advisory committee. See the Physiology website for details on course requirements.
- The recommended completion time for the doctoral program is approximately five years from the start of the MSc, 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] 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 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] Course that may continue over a program. Credit is given when the course is completed.

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.

JCV1060H	Developmental Cardiovascular Physiology
JCV3060H	Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction
JCV3061H	Advanced Topics in Cardiovascular Sciences — Hormones
JCV3062H	Advanced Research in Cardiovascular Sciences — Heart Function
JCV3063H	Advanced Research in Cardiovascular Sciences — Vascular
JCV3064H	Advanced Research in Cardiovascular Sciences — Microvascular Medicine
JCV3065H	Advanced Topics in Cardiovascular Sciences — Systems Biology
JPB1071H	Advanced Topics: Computational Neuroscience
JYG1555H	Advanced Topics: Cellular and Molecular Neurobiology
PSL1000H[0]	MSc Seminars in Physiology (Credit/No Credit)
PSL1014H	Advanced Topics: the Gastrointestinal Epithelium
PSL1020H	Current Topics in Reproductive Endocrinology and Infertility
PSL1024H	Advanced Topics: Neuroendocrinology
PSL1026H	Advanced Topics: Experimental Cell Physiology
PSL1034H	Advanced Topics: Metabolic Disorders
PSL1036H	Advanced Topics: Respiration
PSL1040H	Advanced Topics: Systems Biology in Physiology
PSL1047H	Advanced Topics: Somatosensory and Pain Neuroscience
PSL1048H	Translational Physiology: From Molecules to Model Systems to the Clinic
PSL1050H	Advanced Topics: The Hippocampus from Cell to Behaviour
PSL1053H	Advanced Topics: Critical Assessment of Ion Channel Function
PSL1066H[0]	Research Grant Proposal (Credit/No Credit)
PSL1067H	Advanced Topics: Advances and Techniques in Developmental Physiology
PSL1068H	Advanced Topics: Molecular Basis of Behaviour
PSL1070H	Advanced Topics: Hormone Action
PSL1072H	Advanced Topics in the Neural Basis for Sensation
PSL1075H	Biology in Time
PSL1080H[+]	Advanced Topics: Investigative Developmental Physiology
PSL1086H	Comparative Systems Approach to Diving Physiology
PSL2000H[0]	PhD Seminars in Physiology (Credit/No Credit)
PSL4000Y[0]	Seminars and Graduate Professional Development (Credit/No Credit)
PSL4010Y	Mentored Literature Review Project in Physiology
PSL4020Y	Medical Physiology Practicum (Credit/No Credit)
PSL4030H	Clinical Physiology
PSL4040H	Big Data and Health
PSL4050H	Collaboration and Commercialization in Physiology

[+] 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.

Joint Graduate/Undergraduate

JNR1444Y	Fundamentals of Neuroscience: Cellular and Molecular
JNS1000Y	Fundamentals of Neuroscience: Systems and Behaviour
PSL1374H	Advanced Physiology Laboratory
PSL1421H	Pregnancy and Birth: From Implantation to Newborn Life
PSL1425H	Integrative Metabolism and Its Endocrine Regulation
PSL1432H	Theoretical Physiology
PSL1441H	Systems Level Neuroplasticity
PSL1445H	Mechanistic Molecular and Cellular Neuroscience
PSL1446H	Molecular and Cellular Aspects of Neural Disorders
PSL1452H	Fundamentals of Ion Channel Function
PSL1462H	Molecular Aspects of Cardiovascular Function

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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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
Bathelt, 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

Chambers, Simone - BA, MPH, MA, PhD
Clark, Janine Astrid - BES, MA, PhD
Cochrane, Christopher Brian - BA, MA, PhD
Cook, David - BA, MA, PhD
Craft, Jonathan - MA, PhD
Day, Richard - BA, MA, PhD
Deber, Raisa - BS, MS, PhD
Deibert, Ronald - BA, MA, PhD
Eyoh, Dickson - MA, PhD
Fu, Diana Xuan - BA, MPH, PhD
Gilady, Lilach - BA, MPH, MA, PhD
Green, Jessica - PhD, PhD
Gunitskiy, Vsevolod - BA, MA, MPH, PhD
Haddow, Rodney - BA, MSc, PhD
Handley, Antoinette - BA, MPH, PhD ***(Chair and Graduate Chair)***
Hansen, Randall - BA, MPH, PhD, CRC
Hirschl, Ran - BA, LLB, MA, MPH, PhD, CRC
Hoffmann, Matthew - BSc, PhD
Homer-Dixon, Thomas - BA, PhD
Jung, Courtney - BA, MA, PhD
Kingston, Paul - BA, MA, MPH, DPhil
Kingston, Rebecca - BA, MA, PhD
Kirton, John - BA, MA, PhD
Kohn, Margaret - BA, MA, PhD
Kuokkanen, Rauna - MA, MA, PhD
Lipscy, Phillip - PhD
Loewen, Peter - PhD
Magocsi, Paul - BA, MA, MA, PhD, FRSC
Manger, Mark - DrRerPol
Marshall, Ruth - BA, MA, DPhil
McCarney, Patricia - BA, MCP, PhD
Murali, Kanta - BA, PhD
Nedelsky, Jennifer R. - BA, MA, PhD
Nevitte, Neil - BA, MA, PhD, FRSC
Norrlof, Carla - BS, MIR, MS, DrRerPol
Olive, Andrea - PhD
Ong, Lynette - BA, AM, PhD
Orbinski, James - BSc, MA, MD
Orwin, Clifford - AB, AM, PhD
Pauly, Louis - BA, MA, MSc, MSc, PhD, CRC, FRSC
Prichard, Wilson R.S. - BA, MPH, DPhil
Rayside, David - BA, AM, PhD
Roach, Kent - BA, LLB, LLM, The J. Robert S. Prichard and Ann E. Wilson Chair in Law and Public Policy
Sabl, Andrew - PhD
Schatz, Edward - PhD
Schertzer, Robert Stephen - BS, MSc, ScD
Schneiderman, David - BA, LLB, LLM
Shachar, Ayelet - LLB, BA, LLM, SJD
Shanks, Torrey - BA, PhD
Skogstad, Grace - DrRerPol
Stein, Janice - BA, MA, PhD, OC, FRSC
Teichman, Judith Ann - BA, MA, PhD
Triadafilopoulos, Triadafilos - BA, MA, PhD
Turner, Dale - PhD
Vipond, Robert - BA, MA, AM, PhD
Way, Lucan Alan - BA, PhD
Weinrib, Lorraine - BA, LLB, LLM
White, Graham - BA, MA, PhD
White, Linda - BA, MA, PhD
Williams, Melissa - AB, AM, PhD
Wolfe, David - BA, MA, PhD
Wong, Joseph - BA, MA, PhD, CRC
Wong, Wendy - MA, PhD

Members Emeriti

Andrew, Edward - BA, PhD
Barker, Jonathan - PhD
Donnelly, Michael - BSc, MA, PhD
Falkenheim, Victor - AB, MA, PhD
Griffiths, Franklyn J.C. - BA, MIA, PhD
Horowitz, Gad - BA, PhD
Kontos, Alkis - MA, PhD
LeDuc, Lawrence - BA, MA, PhD
Manzer, Ronald - BEd, BA, MA, PhD
Matthews, Robert - BA, MIA, PhD
Pratt, R. Cranford - BA, BPhil, FRSC, OC
Rotstein, Abraham - BA, PhD
Russell, Paul - BA, BEd, MA
Stren, Richard - BA, MA, PhD
Tuohy, Carolyn - BA, MA, PhD, FRSC
Watkins, Melville - BCom

Associate Members

Abele, Frances - PhD
Acorn, Elizabeth - BA, MA, PhD, JD
Anderson, Noel - BA, PhD
Ariga, Kenichi - MA, MCP, PhD
Attridge, Michael - BA, STL, MTh, DTh
Balaguera Cuervo, Martha - BA, MA
Borins, Sandford - BA, PhD
Brown, Stephen - PhD
Choudhry, Sujit - LLB, LLM
Chyzh, Olga - PhD
Guzzini, Stefano - PhD
Indart, Gustavo - BA, MA, PhD
King, Michael - PhD
Maile, Uahikea - PhD
McDougall, Andrew Wilson - BA, MA, PhD
Smith, Alison - BA, MA, PhD
Stark, Andrew - BA, MSc, AM, PhD

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 taken 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:
  - **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. This requirement may be waived on the basis of MA work. 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 3; 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 3, 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 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 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 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:
  - **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

POL2100H	Issues and Foundations in Canadian Government (core)
POL2102H	Topics in Canadian Politics I
POL2103H	Topics in Canadian Politics II
POL2104H	Political Analysis in Canadian and Comparative Politics (core)
POL2105H	Canadian and Comparative Political Development (core)
POL2128H	Federalism and Diversity in Canada (and Beyond)
POL2139H	The Canadian Welfare State in Comparative Perspective
POL2167H	The Politics of Immigration and Multiculturalism in Canada
POL2316H	Women and Politics
POL2317H	Politics and Policy Analysis
HAD5765H	Case Studies in Health Policy

Comparative Politics

POL2139H	The Canadian Welfare State in Comparative Perspective
POL2241H	Civil War and Counterinsurgency
POL2301H	Political Parties in Comparative Perspective
POL2307H	Political Economy of Technology: from the Auto-Industrial to the Information Age
POL2314H	Public, Private, and the Liberal State
POL2316H	Women and Politics
POL2317H	Politics and Policy Analysis

JRA2321H	Topics in Comparative Politics
POL2321H	Topics in Comparative Politics I
POL2322H	Topics in Comparative Politics II
POL2326H	Democracy and Dictatorship
POL2335H	Business and Politics: Power in a Global World
JRA2337H	Government Law and Politics in Russia
POL2345H	Politics of Growth in Developing Countries
POL2351H	Contentious Politics and Social Movements
JPA2353H	Authoritarianism in Comparative Perspective
POL2364H	Urban Policy and Policymaking
POL2372H	The Comparative Political Economy of Industrial Societies
JRA2391H	Topics in Comparative Politics
POL2391H	Topics in Comparative Politics III
POL2392H	Topics in Comparative Politics IV
POL2394H	Innovation and Knowledge Transfer in City Regions
POL2411H	Topics in Asian Politics
POL2418H	Topics in Middle East Politics
JPF2430H	Conceptualizing Cities in a Global Context
JPF2431H	Global Cities — Core Issues and Challenges (exclusion: JPF2409Y)
POL2700H	Foundations and Approaches to Comparative Politics (core)
POL2701H	Comparative Institutional Politics: Governance, Parties, and Structures of State Power (core)
POL2702H	Constituent Power in Comparative Perspective: Identity, Contention, and Mobilization (core)

Development Studies

POL2326H	Democracy and Dictatorship
POL2345H	Politics of Growth in Developing Countries
POL2351H	Contentious Politics and Social Movements
JPA2353H	Authoritarianism in Comparative Perspective
POL2400H	Theories and Issues — The Politics of Development
POL2405H	Topics in Latin American Politics
POL2408H	Political Economy of International Development
POL2411H	Topics in Asian Politics
POL2416Y	Politics and Society in Contemporary China
POL2418H	Topics in Middle East Politics
JPF2430H	Conceptualizing Cities in a Global Context
JPF2431H	Global Cities — Core Issues and Challenges (exclusion: JPF2409Y)

International Relations

JPJ2037H	International Trade Regulation
JPJ2046H	Law, Institutions, and Development
POL2200Y	International Politics (core)
POL2205H	Topics in International Politics I
POL2206H	Topics in International Politics II
POL2207H	Topics in International Politics III
POL2212H	Human Rights, Politics, and International Relations
POL2213H	Global Environmental Politics
POL2226H	Ethics and International Relations
POL2240H	Geopolitics of Cyberspace
POL2241H	Civil War and Counterinsurgency
POL2256H	Global Summit Governance and Diplomacy
POL2258H	Global Summit Policy Performance
POL2335H	Business and Politics: Power in a Global World

Political Theory

POL2000H	Ancient Political Thought to the Rise of Modernity (core)
POL2002H	Modern and Contemporary Political Thought (core)
POL2007H	Twentieth-Century Political Thought
POL2011H	Problems in the Political Thought of the Socratic School
POL2019Y	Moral Reason and Economic History
POL2021Y	Comparative Studies in Jewish and Non-Jewish Political Thought
POL2024H	Feminist Theory
POL2025H	Enlightenment and its Critics
POL2026H, Y	Topics in Political Thought I
POL2027H	Topics in Political Thought II
POL2028H	Approaches to Political Theory
POL2038H	Studies in Comparative Political Theory
POL2040H	Horizons of Political Reflection

JPR2051H	Fanaticism: A Political History
JPR2058H	Post-secular Political Thought: Religion, Radicalism, and the Limits of Liberalism
POL2061H	Studies in Civic Republicanism
POL2075H	Post-Modern and Contemporary Thought
POL2226H	Ethics and International Relations
JHP2351Y	The People From Nowhere
POL2371H	Urban Revolution: Contemporary Constellations of Spatial Politics
RLG3622H	Maimonides and His Modern Interpreters

Public Policy

POL2167H	The Politics of Immigration and Multiculturalism in Canada
POL2213H	Global Environmental Politics
POL2307H	Political Economy of Technology: From the Auto-Industrial to the Information Age
POL2317H	Politics and Policy Analysis
POL2318H	Public Policy: Theories and Approaches (core)
POL2319H	Public Policy: Applications (core)
POL2335H	Business and Politics: Power in a Global World
POL2364H	Urban Policy and Policymaking
POL2376H	Topics in Public Policy
HAD5765H	Case Studies in Health Policy

Methods and Research Seminars

POL2503H	Thinking Through Research Design
POL2504H	Statistics for Political Scientists
POL2505H	Qualitative Methods in Political Research
POL2507H	Multiple Regression Analysis for Political Scientists
POL2519H	Quantitative Methods and Data Analysis
POL2578H	Topics in Methods
POL2810Y	MA Research Seminar I
POL2811Y	MA Research Seminar II
POL2812Y	PhD Dissertation Proposal Seminar (Credit/No Credit)

Independent Study and Special Topics

POL2800H	Special Topics I
POL2801H	Special Topics II
POL2893H	Topics in Politics I
POL2904Y	Reading course in an approved special field
POL2905H	Reading course in an approved special field

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
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
Uliaszek, 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

Tarshis, Elizabeth - BA, MA, EdD
Yuen, Sandra - DPhil

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 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, PhD; Field: Clinical Psychology Courses

CPS1101H	Clinical Research Design (Exclusion: APD1263H Seminar in Research Methods for MA Students.)
CPS1102H	Statistical Techniques I (Exclusion: JOI1287H Introduction to Applied Statistics.)
CPS1103H	Statistical Techniques II (Exclusion: JOI1288H Intermediate Statistics and Research Design.)
CPS1201H	Neurobiological Bases of Behaviour
CPS1209H	Clinical Neuropsychology
CPS1301H	Cognitive-Affective Bases of Behaviour
CPS1401H	Social and Interpersonal Bases of Behaviour
CPS1501H	Personality
CPS1601H	Psychopathology (Exclusion: APD3260H Psychodiagnostic Systems.)
CPS1701H	Psychological Assessment I (Exclusion: APD3224H Individual Cognitive and Personality Assessment.)
CPS1702H	Psychological Assessment II
CPS1801H	Psychotherapy (Exclusion: APD1202Y Theories and Techniques of Counselling and Psychotherapy.)
CPS1802H	Applied Interventions in Clinical Psychology (Exclusion: APD1203Y+ Practicum I: Interventions in Counselling Psychology.)
CPS1803H	Practicum in Psychological Interventions (Exclusion: APD1203Y+ Practicum I: Interventions in Counselling Psychology.)
CPS1809H	Clinical Psychopharmacology
CPS1810H	Advanced Psychotherapy
CPS1901H	Ethics (Exclusion: APD1219H Ethical Issues in Professional Practice in Psychology and Psychotherapy.)
CPS2901H	Practicum in Clinical Supervision
CPS2902H	Quality Assurance and Consultation
CPS2999H	Summer Practicum
CPS3801H	Multi-Person Therapies (Exclusions: APD1228H Couples Counselling, APD1260H Family Therapy, APD1261H Group Work in Counselling.)
CPS3901H	The Historical and Scientific Foundations of Psychology (Exclusion: APD3204H Contemporary History and Systems in Human Development in Applied Psychology.)
CPS3999H	Clinical Placement I
CPS4999H	Clinical Placement II
CPS5001H	Directed Readings
CPS5002H	Directed Readings
CPS5999Y	Internship (exclusion: APD3268Y PhD Internship)
CPS6999H	Clinical Placement III
CPS7999H	Clinical Placement IV

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

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 the Clinical Psychology field on assessment and the treatment of psychopathology in adults.

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 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 fulfil 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:
  - 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* (0.5 FCE) (RM).
  - 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 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.*

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

Doctor of Philosophy

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 the Clinical Psychology field on assessment and the treatment of psychopathology in adults.

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

The principal aim of the **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 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.

    - 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.
- 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:
    - 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.
    - 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.
    - 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.

APD1202Y	Theories and Techniques of Counselling and Psychotherapy
APD1203Y[+]	Practicum I: Interventions in Counselling Psychology and Psychotherapy
APD1208Y[+]	Cognitive and Personality Theory and Assessment
APD1219H	Ethical Issues in Professional Practice in Psychology and Psychotherapy
APD1228H	Couples Counselling
APD1260H	Family Therapy (Exclusion: APD1261H.)
APD1261H	Group Work in Counselling and Psychotherapy
APD1263H	Research Methods for Clinical and Counselling Psychology (RM)
APD1267H	Emotion-Focused Therapy (Co-requisite: APD1202Y. Exclusion: APD5004H.)
APD3202H	A Foundation of Program Evaluation in Social Sciences (RM)
APD3204H	Contemporary History and Systems in Human Development and Applied Psychology
APD3215H	Advanced Psychotherapy Seminar
APD3217Y[+]	Advanced Practicum in Clinical and Counselling Psychology (Credit/No Credit)
APD3225H	Assessment and Diagnosis of Personality and Psychopathology
APD3260H	Psychodiagnostic Systems
APD3261H[+]	Clinical Supervision and Consultation Practicum (Pre- or co-requisite: APD3217Y[+].)
APD3268Y	Internship in Clinical and Counselling Psychology
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
APD6000H	Special Topics in Applied Psychology and Human Development: Doctoral Level
JOI1287H	Introduction to Applied Statistics (RM)
JOI1288H	Intermediate Statistics and Research Design (RM)
JOI3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)

Individual Reading and Research Courses

APD2252H	Individual Reading and Research in Human Development and Applied Psychology: Master's Level
APD3252H	Individual Reading and Research in Human Development and Applied Psychology: Doctoral Level

[+] *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

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Email: psy.graduate@utoronto.ca
Telephone: (416) 978-3404

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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
Buchsbaum, Bradley - BSc, PhD
Buchsbaum, 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
Goghari, Vina - BA, MA, PhD
Grady, Cheryl - BA, MA, PhD
Haley, David - BA, MA, PhD
Helwig, 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

Mack, Michael - BCS, MSc, PhD
Malti, Tina - MA, MA, PhD, PhD
McAndrews, Mary Patricia - BSc, MA, PhD
McIntosh, Anthony Randal - BSc, MSc, PhD
Monks, Ashley - BSc, MA, PhD
Moscovitch, Morris - BSc, MA, PhD, Dr. Max and Gianna Glassman Chair in Neuropsychology
Murphy, Kelly - BSc, MA, PhD
Neel, Rebecca - BA, MA, PhD
Nestor, Adrian - BPhil, MSc, ScD
Niemeier, Matthias - MA, PhD
Olsen, Rosanna - BS, PhD
Page-Gould, Elizabeth - BS, PhD, CRC
Park, Jun Young - PhD
Paus, Tomas - MD, PhD
Peterson, Jordan - BA, BA, PhD
Plaks, Jason - BA, MA, MPH, PhD
Pratt, Jay - BA, MS, PhD
Ralph, Martin - BSc, PhD
Ronfard, Samuel - BA, MEd, MSc(T), EdD
Rule, Nicholas - AB, MS, PhD, CRC
Ruocco, Anthony Charles - BS, MSc, PhD
Ryan, Jennifer - BS, PhD
Schimmack, Ulrich - BA, MA, DPhil
Schmuckler, Mark - BA, PhD
Schneider, Bruce - BA, PhD
Sekuler, Allison - BA, PhD
Shu, L.H. - PhD
Sommerville, Jessica - PhD
Stellar, Jennifer - BA, PhD
Tafarodi, Romin - BA, PhD
Takehara, Kaori - BSc, MSc, PhD
Taylor, Margot - BA, MA, PhD
Williams, Joseph - PhD
Wolfe, Benjamin Arthur - BA, PhD
Zakzanis, Konstantine - BA, MA, PhD

Members Emeriti

Craik, Fergus - BSc, PhD
Daneman, Meredyth - BA, MA, PhD
Fleming, Alison - BS, PhD
Freedman, Jonathan - AB, PhD
Grusec, Joan - BA, PhD
Hasher, Lynn - AB, PhD
Herman, C. Peter - BA, PhD
Kennedy, John - BSc, MSc, PhD
Lockhart, Robert - BA, MA, PhD
Pichora-Fuller, Margaret Kathleen - AB, MS, DPhil
Polivy, Janet - BS, MA, PhD
Reingold, Eyal - BA, MA, PhD
Schellenberg, Glenn - BSc, PhD
Shettleworth, Sara - BA, MA, PhD
Smith, Marylou - BSc, MSc, PhD
Spence, Ian - MA, MA, PhD
Trehub, Sandra - BComm, MA, PhD
Tulving, Endel - BA, MA, PhD
Walters, Gary - BA, PhD
Yeomans, John - BA, PhD

Associate Members

Lai, Meng-Chuan - MD, PhD
Widjaja, Elysa - MSc, MPH, MBBS

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: an advanced statistics course chosen from a list provided by the department (typically PSY2002H *Statistics II*, taken in Year 1).
  - 0.5 FCE: PSY3000H[0] *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: PSY3001H[0] *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: PSY4000H[0] *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 fulfil 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

[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 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: an advanced statistics course chosen from a list provided by the department (typically PSY2002H *Statistics II*, taken in Year 1).
  - 0.5 FCE: PSY3000H[0] *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: PSY3001H[0] *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: PSY4000H[0] *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

[0] 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

PSY1000H	Directed Studies
PSY1100H[0]	Foundational Research Project
PSY1200H	Selected Topics in Psychology
PSY1210H	Selected Topics in Psychology
PSY1500H	Conceptual Bases of Psychology
PSY2001H	Statistics I
PSY2002H	Statistics II
PSY3000H[0]	External Research Project
PSY3001H[0]	Professional Psychology (Credit/No Credit)
PSY3100H	Psychological Science Skills
PSY4000H[0]	Doctoral Research Project (Credit/No Credit)

Behavioural Neuroscience Core Courses

PSY5101H	Mechanisms of Behaviour
PSY5110H	Advanced Topics in Behavioural Neuroscience I
PSY5111H	Advanced Topics in Behavioural Neuroscience II
PSY5112H	Advanced Topics in Behavioural Neuroscience III
PSY5121H	Advanced Topics in Animal Behaviour and Motivation II
PSY5130H	Advanced Topics in Neuropsychology I

Developmental Core Courses

PSY5303H	Cognitive Development
PSY5304H	Language Development
PSY5305H	Social Development
PSY5310H	Advanced Topics in Development I
PSY5311H	Advanced Topics in Development II

Perception/Cognition/Cognitive Neuroscience Core Courses

PSY5201H	Audition
PSY5203H	Higher Cognition
PSY5204H	Attention
PSY5205H	Memory
PSY5210H	Advanced Topics in Perception I
PSY5211H	Advanced Topics in Perception II
PSY5212H	Advanced Topics in Perception III
PSY5220H	Advanced Topics in Cognition I
PSY5221H	Advanced Topics in Cognition II
PSY5222H	Advanced Topics in Cognition III

Social and Personality Core Courses

PSY5402H	Personality
PSY5403H	Social Cognition
PSY5410H	Advanced Topics in Abnormal I
PSY5411H	Advanced Topics in Abnormal II
PSY5420H	Advanced Topics in Personality I
PSY5421H	Advanced Topics in Personality II
PSY5430H	Advanced Topics in Social Psychology I
PSY5431H	Advanced Topics in Social Psychology II
PSY5432H	Advanced Topics in Social Psychology III
PSY5433H	Advanced Topics in Social Psychology IV

Cross-Listed Courses

JNS1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPM1005Y	Behavioural Pharmacology
JPX1001Y	Parenting: Multidisciplinary Perspectives

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

MHSc

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, MHSc
  - 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 enrols 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).

Contact and Address

Public Health Sciences and Community Health Programs

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Bioethics Program

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Public Health Sciences: Graduate Faculty

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Atkinson, Michael - BA, MA, PhD
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Bondy, Susan - BA, MSc, PhD
Boydell, Katherine Mary - BA, MHSc, PhD
Briollais, Laurent - BSc, MSc, PhD
Brown, Adalsteinn - AB, PhD ***(Dean)***
Bull, Shelley - BMath, MMath, PhD
Burchell, Ann - BSc, MSc, PhD
Caron-Beaudoin, Elyse - BA, MSc, PhD
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Chiarelli, Anna Maria - BSc, MHSc, DPhil
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Coleman, Brenda - BA, BScN, MSc, PhD
Côté, Pierre - MSc, PhD
Cotterchio, Michelle - BSc, MPH, MS, PhD
Craig, Shelley - BS, MSW, PhD
Crowcroft, Natasha - BA, MA, MSc, MBBS, PhD
Deber, Raisa - BS, MS, PhD
Demers, Paul - BSc, MSc, PhD
Di Ruggiero, Erica Marie Christine - BSc, MHSc, PhD
Diamond, Miriam - MSc, MSc, PhD
Du Mont, Janice Arlene - BA, MEd, EdD
Einstein, Gillian - AB, PhD
Escobar, Michael - BS, PhD
Evans, Greg - PhD
Ferris, Lorraine - AB, MA, LLM, LLM, PhD
Fisman, David - MPH, MD
Forman, Lisa - SJD
Gagnon, France - PhD ***(Associate Dean, Research)***
Gesink, Dionne - BSc, MSc, DPhil ***(Associate Dean, Academic Affairs)***
Gignac, Monique - BSc, MA, PhD
Glazier, Richard - MPH, MD
Grunfeld, Eva - MD, PhD
Guttmann, Astrid - BA, AB, MSc, MSc, MDCM
Hanley, Anthony - BSc, MSc, PhD
Harris, Shelley - BSc, MSc, PhD
Hung, Rayjean - MSc, DrMedVet, PhD
Jha, Prabhat - DrMed, MD, PhD
Khan, Yasmin - BSc, MD
Knight, Julia A. - BSc, MSc, PhD
Kohler, Jillian - BA, MA, PhD
Kontos, Pia - BA, MA, PhD
Kotsopoulos, Joanne - BSc, MSc, PhD
Liu, Geoffrey - BSc, MSc, MD
Lou, Wendy - DPhil
MacEachen, Ellen - BA, MSc, PhD
Mann, Robert - BA, MASc, PhD
McGeer, Allison - BSc, MSc, MD
McPherson, Amy - BSc, PhD
Muntaner, Carles - MHSc, MD, PhD
Mustard, Cameron - AB, ScD
Naylor, C. David - MD, PhD
O'Campo, Patricia J. - BSc, PhD
Poland, Blake - BA, PhD
Pullenayegum, Eleanor - BM, PhD
Rabeneck, Linda - BSc, MPH, MD
Ratnapalan, Savithiri - MEd, MBBS
Rehm, Jurgen - PhD
Renwick, Rebecca - DipOT , BA, PhD
Rodin, Gary M. - BSc, MD
Room, Robin - MA, PhD
Rosella, Laura - BSc, MHSc, MHSc, PhD, DPhil
Ross, Lori Elizabeth - BSc, PhD, DPhil
Roth, Daniel - BSc, MSc, MD
Rush, Brian - BA, MA, PhD
Saarela, Olli Samuli - MSS, DPhil ***(Graduate Coordinator)***
Sass-Kortsak, Andrea - BSc, MHSc, PhD
Scott, James - BSc, PhD
Scott, Jeremy - BSc, MS, DPhil
Siddiqi, Arjumand - ScD
Siegel, Jeffrey Alexander - BS, MS, PhD
Smylie, Janet - MPH, MD
Stafford, James - BS, MS, PhD
Stewart, Suzanne - BA, MA, PhD
Strike, Carol - BA, MSc, PhD, PhD
Strug, Lisa - BS, BA, SM, PhD
Sun, Lei - BS, PhD
Tarasuk, Valerie - BA, BEd, BASc, MSc, PhD
Tarlo, Susan - MBBS
Thompson, Alison - BA, MA, PhD
To, Teresa - BSc, MSc, PhD
Tomlinson, George - BSc, MSc, PhD

Tompa, Emile - BEc, MEc, PhD
Tricco, Andrea - MSc, PhD
Urquia, Marcelo - PhD
Willan, Andrew - BEd, BA, MSc, PhD
Xu, Wei - MSc, PhD
Zlotkin, Stanley - BSc, MD, PhD

Members Emeriti

Andrews, David - BSc, MSc, PhD
Ashley, Mary Jane - DPH, MSc, MD
Baines, Cornelia - MSc, MSc, MD
Calzavara, Liviana - BA, MA, PhD
Chalin Clark, Catherine - BSN, MA, MDiv, PhD, RN
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Cole, Donald - MSc, MD
Daar, Abdallah Salim - MD
Eakin, Joan - BA, MA, PhD
Ellison, Philip A. - MBA, MD
Eyssen, Gail - BSc, MSc, MSc, PhD
Holness, D. Linn - MHSc, MD
House, Ronald A - BSc, BASc, MSc, MSc, MD, MD
Hsieh, John - BSc, MA, PhD
Kelner, Merrijoy - MA, PhD
McDonough, Peggy - BSN, BSc, MSc, PhD
Miller, Anthony - BA, MA, MB, BChir, MD
Millson, Margaret - BSc, MHSc, MD
Osborn, Richard - AB, PhD
Purdham, James - BSc, PhD
Robertson, Ann - BSc, MSc, PhD
Shah, Chandrakant - DipCH, MBBS
Skinner, Harvey - BA, MA, PhD
Wigdor, Blossom - BA, MA, PhD
Young, Kue - DrMed, PhD

Associate Members

Abdool, Rosalind Amirah - BA, MA, PhD
Abejirinde, Ibukun - BA, MSc, MD, PhD
Abelsohn, Alan - MBChB
Abner, Erika - BA, LLB, MEd, MEd, PhD, PhD
Abolhassani, Farbod - BS, MS
Abramovich, Alex - BA, MA, PhD
Abuelaish, Izzeldin - MPH, MBBS, MD
Afanasyeva, Marina - MPH, MD, PhD
Aggarwal, Monica - MPA, PhD
Agha, Mohammad - BS, MSc, PhD
Aghdassi, Ellie - BSc, PhD
Agic, Branka - MHSc, MD, PhD
Allen-Scott, Lisa K. - PhD
Alleyne, Julia - MD
Allison, Kenneth R. - BSc, MHSc, MSc, PhD
Andersen, Andrea - BSc, MS
Anderson, James - BA, MA, MHSA, PhD
Arora, Paul - BSc, MSc, PhD
Arrandale, Victoria - BSc, BS, MSc, MSc, PhD, PhD
Ataullahjan, Anushka - BSc, MS, PhD
Baliunas, Dalia - BSc, MSc, PhD
Banerji, Anna - MPH, MD
Batty, Helen - MEd, MD
Bender, Jacqueline - BSc, MSc, DPhil
Bennett-AbuAyyash, Caroline Wadad - BA, MSc, PhD
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Bianchi, Andria Marie - BA, MA, PhD
Binns, Malcolm - BA, MSc, PhD
Biswas, Avi - BA, BA, PhD
Bolotin, Shelly - BSc, MSc, MSc, PhD
Bottoni, Daniela - BSc, MHSc
Bozek, Paul - BASc, MEng
Bray, Riina - BASc, MSc, MHSc, MD
Brook, Jeffrey - BS, MS, PhD
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Buchman, Daniel - BA, MSW, PhD
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Campbell, Monica - BSc, MES, PhD
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Chan, Adrienne - MPH, MD
Charles, Jocelyn - BSc, MD
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Deeks, Shelley - MHSc, MD
DeRocher, Mary Elizabeth - BSc, MSc, MD
Di Ciano, Patricia - PhD
Dimaras, Helen - BSc, PhD
Doukas, Kathleen - BSc, MD
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Felsky, Daniel - BSc, PhD
Ferrence, Roberta - BA, MA, PhD
Finegood, Diane T. - BSChE, MSc, PhD
Firestone, Michelle - BSc, MHSc, PhD
Fitzgerald-Husek, Alanna - MPH, MD
Fodor O'Brien, Mary Elizabeth - MHSc
Freeman, Risa - BSc, MEd, MD
Fung, Susanna - MD
Gardner, Paula - BEd, BA, MA, PhD
Gardner, Paula Marie - PhD
Gardner, Sandra - BSc, MMath, PhD
Gewurtz, Rebecca - BSc, BSc, MSc, PhD
Ghavam-Rassoul, Abbas - BSc, MHSc, MD
Giesbrecht, Norman - BA, MA, PhD
Gill, Julia - BSc, MHSc, JD
Gladstone, Brenda - BA, PhD
Glover Takahashi, Susan - BSc, MA, EdD
Goldin Rosenberg, Dorothy - DipP, MES, PhD
Goodstadt, Michael Stephen - BA, PhD
Gord, Charna - MEd
Gournis, Effie - BSc, MPH, MSc
Gower, Stephanie - BSc, MSc, PhD
Granek, Leeat - BA, MA, PhD
Green, Samantha - BA, MD
Greer, Amy - BSc, MSc, PhD
Hackett, Kristy Melissa - BSc, MSc, PhD
Haibe-Kains, Benjamin - PhD
Haider, Rukhsana - MSc, MBBS, PhD
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Harris, Margaret Anne - BSc, MSc, PhD
Hart, Trevor - BA, PhD
Heath, Anna Louise - MMath, PhD
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Hunt, Cindy L. - BScN, MPH, DPH
Husbands, Winston - BA, MPH, PhD

Jetha, Arif - BA, MSc, PhD
Johnson, Ian Lindsay - BSc, MSc, MD
Johnstone, Jennie - BSc, MD, PhD
Juando-Prats, Clara - MSc, PhD
Julian, James Anthony - BSc, MMath
Kabali, Conrad Byera - BS, MSc, PhD
Kabasele, Karl - MPH, DrMed
Keown-Stoneman, Charles - BSc, MSc, PhD
Kerr, Kathleen - DrMed
Khenti, Akwatu Alleyne - BA, MA
Kirkham, Tracy - BMLS, MSc, DPhil
Kirsh, Victoria - BSc, MSc, PhD
Kone, Anna Pefoyo - MSc, PhD
Kroch, Abigail E. - BA, MPH, PhD
Kudla, Irene - MHSc
Kustra, Rafal - PhD
Landes, Megan - BA, MSc, MD
Landsman, Victoria - BSc, MA, PhD
Langlois, David J. - BA, MA, PhD
Lau, Lincoln Lee Hang - BSc, PhD
Lay, Christine - BSc, MClSc , MD
Lee, Julia - MPH, DrMed
Lee, Robyn - BScN, SB, PhD
Leece, Pamela - BSc, MSc, MD
Liss, Gary - MD, MS
Liu, Zhihui - BSc, MSc, PhD
Lo, Christopher - MA, PhD
Lofters, Aisha - BSc, MD, PhD
Longo, Christopher - BA, MSc, PhD
Macdonald, Liane - BA, MSc, MD
MacFadden, Derek - BASc, MD, ScD
MacIntyre, Elaina Anne - BSc, PhD
Maclaren, Kim Alexandra - BA, PhD
MacNeill, Heather - BSc, MD
Mah, Catherine - MD, PhD
Marvel, Stu - MA, LLM, PhD
Mashford-Pringle, Angela - BS, MA, DPhil
Mason, Robin - BA, MEd, MA, PhD
Matheson, Flora - BA, MA, PhD
Maximova, Katerina - AB, MA, PhD
McCradden, Melissa - BA, MHSc, PhD
McDonald, Maria - BComm, MHSc, JD
McKinnon, Britt - BSc, MSc, PhD
McLaughlin, John Ross - BSc, MSc, PhD
McTavish, Elspeth E. - MPH, MHSA, MD
Mehrani, Mehvish - MPH, MS, MD
Merali, Ali - BSc, MSc
Mitani, Aya Alice - BA, MPH, PhD
Mitsakakis, Nikolaos - BS, MS, MMath, DPH
Mohammed, Shan - BScN, BSc, MN, PhD
Moineddin, Rahim - BSc, MSc, MSc, PhD
Mollayeva, Tatyana - MD, PhD
Moola, Fiona - BPHE, MSc, PhD
Morisano, Dominique - PhD
Morris, Shaun - MD
Mulligan, Kate - BASc, MA, PhD
Murphy, John H. - BSc, MHSc, PhD
Murti, Michelle - BASc, MPH, MD
Nayer, Marla - BSc, MEd
Nelson, LaRon - PhD
Nemethy, Kataryna - BSc, MSc
Nisenbaum, Rosane - BSc, MSc, PhD
Nnorom, Onyenyechukwu - BSc, MPH, MDCM
Norman, Cameron - BA, MA, PhD
Nowgesic, Earl - DPH
Oandasan, Ivy - BSc, MHSc, MD
Ofner, Marianna - BScN, MHSc, PhD
Ondrusek, Nancy - BSc, MSc, MSc, PhD
Pakes, Barry - BSc, MPH, MD
Paneduro, Denise - BA, AM, PhD
Parthimos, Margie - BSc, MSc, PhD
Patra, Jayadeep - BA, MPsy, MPsy, PhD
Peranson, Judith - BSc, MPH, MD
Perez-Brumer, Amaya - AB, MPH, DPhil
Pinto, Andrew - BSc, MSc, MD
Popova, Svetlana - MPH, MSD, DSW, MedScD
Poulin-Costello, Melanie - BM, MS
Prowse, Rachel J. - BSc, MSc, PhD
Quinonez, Carlos R. - MSc, DMD, PhD
Rachlis, Beth Stephanie - BSc, MSc, PhD
Rea, Elizabeth - MSc, MD
Redditt, Vanessa - MD
Reel, Kevin - BSc(OT), MSc
Richardson, Denyse - MEd, MD
Richmond, Sarah Ann - BA, MSc, PhD
Ritchie, Amanda Joan - BSc, MHSc, DPhil
Robertson, Jamie - BA, BSc, MA, PhD
Rocha, Cecilia - MA, PhD
Rodrigues, Kevin - BA, MA
Roerecke, Michael - MSc, PhD
Rolston, Imara - BA, MA, PhD
Rothman Shapero, Linda - MHSc, PhD
Rouleau, Katherine - BSc, MHSc, MDCM
Schwartz, Kevin - MSc, MD
Scott-Marshall, Heather - BSc, MSc, PhD
Scott, Helen - BA, BSc, MSc, PhD
Shah, Nirtal - BSc, MPH, MSc
Shankardass, Ketan - BSc, MHSc, PhD
Shanker, Ruby - MHSc, MBBS
Shuper, Paul - BA, MA, PhD
Sicchia, Suzanne - AB, MHSc, PhD
Silverman, Michael - MD
Singla, Daisy - PhD
Smith, Brendan - BSc, MSc, PhD
Smith, Maxwell James - BA, MSc, PhD
Sornpaisarn, Bundit - MA, MD, PhD
Stephens, Derek - BSc, BA, MSc
Sullivan, Terrence - BS, MA, PhD
Sutradhar, Rinku - BSc, MMath, PhD
Sykes, Jenna R. - BM, MMath
Thompson, Aaron - BSc, MPH, MD
Thorpe, Kevin - MMath
Thurairatnam, Ragavan - BASc
Till, Christine - BSc, MA, PhD
Timothy, Roberta - AB, AM, MEd, PhD
Tritchler, David - BA, MS, ScD
Urch, Bruce - DIH, BSc, MSc, PhD
van Lettow, Monique - BSc, MPH, PhD
Vanderlinden, Loren - BSc, MA, PhD
Wagner, Franklin - MHSc, MA
Walker, Jennifer D. - BSc, PhD
Wang, Lisa - BEng, MSc
Wang, Peter - MPH, MD, PhD
Webster, Fiona - BA, MA, PhD
Wells, Samantha - BA, MA, PhD
Whitehead, Cynthia - AB, MHSc, MD, PhD
Wickens, Christine - BSc, MA, PhD
Williams, Constance - BSc, MD, PhD
Wilson, Sarah - BSc, MSc, MD
Wong, Andy Kin On - BS, PhD
Wong, Josephine - BScN, BA, MSc, PhD
Woodruff, Sarah - BPHE, MSc, PhD
Yarmoshuk, Aaron - BA, MSc, PhD
Zakus, David - BSc, MES, MSc, PhD
Zhu, Jodie - BSc, MSc

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

Time Limit

3 years full-time;
6 years 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[0] *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

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

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: CHL5520H *Indigenous Health*
  - 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.
- 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[0] *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

[0] 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.
- 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: CHL5904H *Perspectives in Occupational and Environmental Health — Legal and Social Context*
  - 0.5 FCE: CHL5910H *Occupational and Environmental Hygiene I*
  - 0.5 FCE: CHL5912H *Occupational and Environmental Toxicology*
  - 0.5 FCE in physical agents: CHL5907H *Radiological Health* **or** CHL5914H *Physical Agents I-Noise*
  - 0.5 FCE in research methods: CHL5220H *Introduction to Quantitative Research* **or** CHL5401H *Epidemiologic Methods I*
  - 3.0 FCEs in one of the emphases described below
  - up to 2.5 FCEs in approved courses related to the student's area of study
  - minimum 1.0 FCE in a 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 may 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

Emphases 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, CHL5207Y[0], 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[0], 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

[0] 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[0] *Laboratory in Statistical Design and Analysis*.

[0] 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* or
      - HAD6501H *Introduction to Methods for Health Professions Education Research*
    - 0.5 FCE: CHL4002H *Critical Appraisal and Use of Evidence*
    - 0.5 FCE: CHL4003H[0] *Leading High-Performing Health Systems*
    - 0.5 FCE: CHL4004H *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

[0] 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[o] *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: CHL5423H^{0} *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.

- 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: 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.

Program Length

4 years full-time; 6 years flexible-time

Time Limit

6 years full-time; 8 years flexible-time

[+] 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.

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.
- The program favours individuals with outstanding academic credentials and demonstrated evidence of scholarly ability and personal maturity.
- 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[0] *Applied Learning in Bioethics* (practicum)
- CHL3051H *Research Ethics*
- CHL3052H[0] *Practical Bioethics* (capstone course)

[0] Course that may continue over a program. The course is graded when completed.

Public Health Sciences: Community Health MScCH

Master of Science in Community Health

Program Description

The MScCH is an innovative program designed to meet the needs of experienced health professionals who wish to enhance their knowledge and skills in public health. It is intended for practising health professionals and/or individuals who can demonstrate significant experience in the health-care field. Five fields are offered:

- Addictions and Mental Health
- Family and Community Medicine
- Health Practitioner Teacher Education
- Occupational Health Care
- Wound Prevention and Care

The program 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 Dalla Lana School's additional admission requirements stated below.
- A bachelor's degree from a recognized university in a public health specialty and/or one of the regulated health professions in Ontario with the equivalent of a minimum mid-B average in the final academic year.
- Relevant academic preparation and professional experience as a public health, community, or clinical practitioner.
- Some fields (i.e., Family and Community Medicine, Occupational Health Care, and Wound Prevention and Care) require appropriate certification/licensure in a regulated health profession and may require a valid license to practise in Canada or the student's home jurisdiction.

Program Requirements

- The MScCH is a **coursework**-only program which requires the completion of **5.0 full-course equivalents (FCEs)** as follows:
  - 0.5 FCE of a core public health sciences subject
  - 0.5 to 1.0 FCE in supervised field placements or practica
  - Normally 2.5 FCEs in field-specific required courses
  - 1.0 to 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.
- A diploma in Community Health may be awarded in exceptional circumstances to students who have completed 70% of the program requirements (at least 3.5 full-course equivalents (FCEs), including the required courses for the field, and with the approval of the department.

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

CHL5004H	Introduction to Public Health Sciences
CHL5005H	Public Health Research (Credit/No Credit)

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

CHL5201H⌘	Biostatistics I
CHL5202H⌘	Biostatistics II
CHL5203H⌘	Survey Design and Social Research Methods in Public Health
CHL5207Y[0]	Laboratory in Statistical Design and Analysis
CHL5208Y	Advanced Laboratory in Statistical Design and Analysis
CHL5209H⌘	Survival Analysis I
CHL5210H⌘	Categorical Data Analysis
CHL5212H⌘	Predictive Modelling in the Health Sciences
CHL5213H⌘	Methods for Analysis of Microbiome Data
CHL5220H⌘	Introduction to Quantitative Research
CHL5221H⌘	Introduction to Qualitative Research
CHL5222H⌘	Analysis of Correlated Data
CHL5223H⌘	Applied Bayesian Methods
CHL5224H⌘	Modern Statistical Genetics
CHL5225H⌘	Advanced Statistical Methods for Clinical Trials
CHL5226H⌘	Mathematical Foundations of Biostatistics
CHL5227H⌘	Introduction to Statistical Methods for Clinical Trials
CHL5228H	Statistical Methods for Genetics and Genomics Research Seminar (Credit/No Credit)
CHL5229H⌘	Modern Biostatistics and Statistical Learning (prerequisite: CHL5226H)
CHL5230H⌘	Applied Machine Learning for Health Data
CHL5250H[+,⌘]	Special Topics in Biostatistics
CHL5260H[0,⌘]	Doctoral Seminar Series in Biostatistics

[+] 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.

Clinical Public Health

CHL5630Y	Wound Prevention and Care
CHL5631H⌘	Integrating Public Health and Clinical Care: The Case of TB
CHL5632H⌘	Application of Implementation Science in Global Health (prerequisite: one or more qualitative or quantitative research methods course, or one program evaluation course)
CHL5633H⌘	Planetary and Global Health Ethics

Epidemiology

CHL5401H⌘	Epidemiologic Methods I
CHL5402H	Epidemiologic Methods II
CHL5403H⌘	Epidemiology of Non-Communicable Diseases
CHL5404H⌘	Research Methods I
CHL5405H⌘	Health Trends and Surveillance
CHL5406H	Quantitative Methods for Biomedical Research
CHL5407H⌘	Categorical Data Analysis for Epidemiologic Studies
CHL5408H⌘	Research Methods II
CHL5409H⌘	Cancer Epidemiology
CHL5410H⌘	Occupational Epidemiology

CHL5412H⌘	Communicable Disease Epidemiology, Prevention, and Control
CHL5413H⌘	Public Health Sanitation
CHL5416H⌘	Environmental Epidemiology
CHL5417H⌘	Tobacco and Health: From Cells to Society
CHL5418H⌘	Scientific Overview in Epidemiology
CHL5419H⌘	Social Epidemiology
CHL5420H⌘	Global Health Research
CHL5423H[0]	Doctoral Seminar in Epidemiology
CHL5424H⌘	Advanced Quantitative Methods in Epidemiology
CHL5425H⌘	Mathematical Epidemiology of Communicable Diseases: An Introduction
CHL5426H⌘	Population Perspectives for Epidemiology
CHL5428H⌘	Epidemiological Methods for Causal Mediation Analyses
CHL5429H⌘	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)
CHL5430H⌘	Fundamentals of Genetic Epidemiology
CHL5431H⌘	Spatial Epidemiology: Introductory Methods and Applications
CHL5432H⌘	Epidemiological Methods for Communicable Diseases (prerequisites: CHL5201H, CHL5401H, and CHL5412H; or equivalent)
JRH1000H	Introduction to Pharmacoepidemiology

[0] Course that may continue over a program. The course is graded when completed.

Family and Community Medicine

CHL5601H⌘	Appraising and Applying Evidence to Assist Clinical Decision-Making
CHL5603Y	Social, Political, and Scientific Issues in Family Medicine
CHL5605H⌘	Research Issues in Family Medicine/Primary Care
CHL5606H	Research in Family Medicine/Primary Care Methodological Applications
CHL5607H⌘	Teaching and Learning by the Health Professions: Principles and Theories
CHL5608H⌘	Teaching and Learning by the Health Professions: Practical Issues and Approaches
CHL5609H⌘	Continuing Education in the Health Professions
CHL5610H⌘	Theory and Practice of Behaviour Change in Health Professional Settings
CHL5611H⌘	Continuing Education Planning, Management and Evaluation in the Health Professions
CHL5612H⌘	The Theory and Application of Interprofessional Education for Collaborative Patient-Centred Practice
CHL5613H⌘	Leading Improvement in the Quality of Health Care for Community Populations
CHL5614H⌘	Curriculum Foundations in Health Practitioner Field-Based Education
CHL5615H⌘	Assessment and Evaluation Issues in Health Practitioner Field-Based Education
CHL5616H⌘	Applied Survey Methods for Health Care Professionals
CHL5617H⌘	Educational Technology for Health Practitioner Education
CHL5618H⌘	Family Medicine and Interprofessional Primary Care in the Global Health Context
CHL5619H⌘	Faculty Development in the Health Professions (prerequisites: CHL5607H and CHL5608H)
CHL5622H⌘	Patient-Related Health Care and Public Policy in Canada
CHL5623H⌘	Practical Management Concepts and Cases in Leading Small Health Organizations
CHL5624H⌘	Historical, Ethical, and Philosophical Foundations of Public Health

[0] Course that may continue over a program. The course is graded when completed.

Global Health

CHL5700H⌘	Global Health
CHL5701H	Doctoral Seminar, Collaborative Specialization in Global Health (Credit/No Credit)
CHL5702H⌘	History of International Health
CHL5704H⌘	International Human Rights Law and Global Health: The Right to Health in Theory and Practice
CHL5706H⌘	Women and Women's Health in Countries in Conflict
CHL5707H⌘	Health: An Engine for the Journey to Peace

Health Promotion

CHL5801H⌘	Health Promotion 1
CHL5803H⌘	Health Promotion 2
CHL5804H⌘	Theories for Health Promotion and Public Health Intervention
CHL5805H⌘	Critical Issues in Health Promotion Practice
CHL5806H+,⌘	Health Promotion Field Research
CHL5807H⌘	Health Communications
CHL5808H⌘	Health-in-All-Policies: Approaches to Achieve a Healthier City
CHL5809H⌘	Ecological Public Health
CHL5810H⌘	Race, Ethnicity, and Culture in Health (REACH)
CHL5811H⌘	Introduction to Qualitative Research

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

Indigenous Health

CHL5520H⌘	Indigenous Health
CHL5521H⌘	Indigenous Practicum Preparation
CHL5522H⌘	Indigenous Food Systems, Environment, and Health
CHL5523H⌘	Indigenous Health and Social Policy
CHL5524H⌘	Indigenous Health Theory and Methods

Nutrition and Dietetics

CHL5650H⌘	Foundations of Practice I
CHL5651H⌘	Foundations of Practice II
CHL5652H⌘	Foundations of Practice III
CHL5653H⌘	Community Nutrition
CHL5654H⌘	Nutrition Programs and Strategies
CHL5655H⌘	Nutrition Metabolism for Public Health Nutrition Professionals
CHL5656Y	Nutrition and Dietetics Culminating Project (prerequisites: CHL5650H, CHL5651H, and CHL5652H)
NFS1201H	Public Health Nutrition
NFS1484H	Advanced Nutrition

Occupational and Environmental Health

CHL5902H⌘	Advanced Occupational Hygiene
CHL5903H⌘	Environmental Health
CHL5904H⌘	Perspectives in Occupational and Environmental Health — Legal and Social Context
CHL5905H⌘	Clinical Studies in Occupational Health
CHL5907H⌘	Radiological Health
CHL5910H⌘	Occupational and Environmental Hygiene I
CHL5911H⌘	Occupational and Environmental Hygiene II
CHL5912H⌘	Occupational and Environmental Toxicology
CHL5914H⌘	Physical Agents I — Noise
CHL5915H⌘	Control of Occupational Hazards
CHL5917H⌘	Concepts in Safety Management
CHL5918H⌘	Biological Hazards in the Workplace and Community
CHL5919H⌘	Public Health Mycology
CHL5920H0,⌘	Occupational and Environmental Health Doctoral Seminar Series
CHL5921H⌘	Protecting the Public from Air Pollution
CHL5950H⌘	Special Topics in Occupational and Environmental Health

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

Public Health Policy

CHL5300H⌘	Public Health Policy
CHL5308H⌘	Tools and Approaches for Public Health Policy Analysis and Evaluation
CHL5309H⌘	Advanced Analysis of Topical Issues in Public Health Policy

Public Health Sciences

JRH5124H⌘	Public Health Ethics

Social and Behavioural Health Sciences

CHL5101H⌘	Social and Behavioural Theory and Health
CHL5102H⌘	Social and Political Forces in Health
CHL5105H⌘	Social Determinants of Health

CHL5109H⌘	Gender and Health
CHL5110H⌘	Theory and Practice of Program Evaluation
CHL5113H⌘	Global Migration and Health
CHL5115H⌘	Qualitative Analysis and Interpretation
CHL5117H⌘	Women, Children, and Adolescent Health: A Glocal Perspective
CHL5118H⌘	International Health, Human Rights, and Peace-Building
CHL5120H⌘	Population Health Perspectives on Mental Health and Addictions
CHL5121H⌘	Genomics, Bioethics, and Public Policy
CHL5122H⌘	Advanced Qualitative Research: Framing, Writing, Beyond (Credit/No Credit)
CHL5126H⌘	Building Community Resilience
CHL5128H⌘	Intersectionality, Inequity, and Public Health
CHL5129H⌘	Introduction to Mixed Methods Research for Public Health
CHL5130H⌘	Advanced Methods in Applied Indigenous Health Research
CHL5131H⌘	Theoretical Foundations of Qualitative Health Research
CHL5132H⌘	Population Health Intervention Research (PHIR)
CHL5133H⌘	Evaluating Quantitative Public Health Research
CHL5134H⌘	Institutional Ethnography
CHL5150H⌘	Data Collection Methods for Research and Evaluation Projects
JRP1000H⌘	Theory and Method for Qualitative Researchers: An Introduction

Practica Courses

CHL5620Y[0]	Practicum in Family Community Medicine (Credit/No Credit)
CHL5621H[+]	Extension to Practicum in Family Community Medicine (Credit/No Credit)
CHL5690H[0]	MScCH Required Practicum (Credit/No Credit)
CHL5691H[0]	MScCH Optional Practicum (Credit/No Credit)
CHL6010Y[+]	Required MPH Practicum (Credit/No Credit)
CHL6011H[+]	Required Practicum Extension (Credit/No Credit)
CHL6012Y[+]	Long Extension to Required Practicum (Credit/No Credit)
CHL6013H[0]	Required MPH Advanced Standing Practicum (Credit/No Credit)
CHL6020Y[+]	Optional MPH Practicum (Credit/No Credit)
CHL6021H[+]	Optional Practicum Extension (Credit/No Credit)
CHL6022Y[+]	Long Extension to Optional Practicum (Credit/No Credit)

[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.

Reading Courses and Research Projects

CHL7001H	Directed Reading
CHL7002H	Directed Research

Special Topics Courses

CHL8001H	Selected Topics in Public Health Issues
CHL8002H	Selected Topics in Public Health: Methods and Approaches to Research and Practice

Doctor of Public Health Courses

CHL4001H⌘	Contemporary Approaches to Population Health and Health Equity
CHL4002H⌘	Critical Appraisal and Use of Evidence
CHL4003H[0,⌘]	Leading High Performing Health Systems
CHL4004H⌘	Global Health Policy
CHL4005H⌘	Governance and Financial Leadership
CHL5005H	Public Health Research (Credit/No Credit)
CHL5132H	Population Health Intervention Research (PHIR)
CHL5624H	Historical, Ethical, and Philosophical Foundations of Public Health
HAD5763H	Advanced Methods in Health Services Research
HAD5765H	Case Studies in Health Policy
HAD5778H	Comparative Health Systems and Policy
HAD6501H	Introduction to Methods/Methodologies for HPER

[0] Course that may continue over a program. The course is graded when completed.

Collaborative Specialization Courses

Addiction Studies

PAS3700H⌘	Multidisciplinary Aspects of Addictions
PAS3701H⌘	Advanced Research Issues in Addictions

Bioethics

CHL3020H⌘	Ethics and Artificial Intelligence for Health

Community Development

UCS1000H⌘	Community Development

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
- Workplace Learning and Social Change
  - 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 - MASc, 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, MASc, PhD
Musselman, Kristin - MSc(PT), PhD
Mustard, Cameron - AB, ScD
Nalder, Emily - BOTh, PhD
Nixon, Stephanie - BHSc(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
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Rochon, Elizabeth - BA, MSc, PhD
Roy, Eric - BSc, MPE, PhD
Sabiston, Catherine - BS, MA, PhD
Salbach, Nancy - BSc(PT), BS, 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 - MS, 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
Polatajko-Howell, Helene J. - PhD
Verrier, Molly - DipOT, MHSc

Associate Members

Berbrayer, David - MD, BScMed
Chan, Vincy - DPhil
Colella, Tracey J.F. - MSc, PhD
Colquhoun, Heather - PhD
Cullen, Nora - MD
Fehlings, Darcy - MD
Furlan, Julio - MSc, DrMed, PhD
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
Thaut, 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.

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. Related disciplines include basic sciences, engineering, 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.
  - **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.** Students must complete **2.5 full-course equivalents (FCEs)** as follows:
  - REH1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
  - REH2001Y[0] *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.
- 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.
- 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.

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

[0] Course that may continue over a program. Credit is given when the course is completed.

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. Related disciplines include basic sciences, engineering,

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.
  - **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.** Students must complete **3.5 full-course equivalents (FCEs)** as follows:
  - REH1100H *Theory and Research in Rehabilitation Science* (0.5 FCE).
  - REH2001Y[0] *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

[0] 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.
  - **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 **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.
  - REH3001Y[0] *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

        - 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).
    - REH3001Y[0] *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

[0] 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.
  - REH3001Y[0] *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 Practicum* (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

[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
    - 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.

- REH3001Y[0] *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 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

[0] Course that may continue over a program. Credit is given when the course is completed.

Rehabilitation Sciences: Rehabilitation Science MSc, PhD Courses

Since not all courses are offered each academic year, the department should be consulted each session as to course offerings.

REH1100H	Theory and Research in Rehabilitation Science
REH1120H	Research Methods for Rehabilitation Science
REH1130H	Theory and Research in Occupational Science
REH1140H	Theory and Research in Physical Therapy
REH1510H	Disordered and Restorative Motor Control
REH2000H	Individual Reading and Research Course
REH2001Y[0]	Rehabilitation Presentations and Proceedings (Credit/No Credit)
REH3001Y[0]	Advanced Rehabilitation Presentation and Proceedings (Credit/No Credit)
REH3100H	Advanced Rehabilitation Research Issues
REH3140H	Disability, Embodiment, and Voice in the Rehabilitation Science Context
REH3301H	Knowledge Translation in Rehabilitation: Foundational Knowledge and Innovative Applications
REH3302H	Determinants of Rehabilitation Practice
REH3303H	Rehabilitation Clinical Practicum
REH3400H	Therapeutic Exercise in Rehabilitation: Emerging Trends and Research Approaches
REH3500H	Gender, Work, and Health
REH5100H	Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications
REH3600H	Synthesis Toolkit: Approaches and Methodologies
JRP1000H	Theory and Method for Qualitative Researchers: An Introduction

[0] 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:

- 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.

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 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.

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.
- Students 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 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.** 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

SLP3001H	Theoretical Foundations of Communication Sciences
SLP3002H	Research Methodologies in Communication Sciences
SLP3003H[0]	Reading Seminar 1
SLP3004H,Y	Reading Seminar 2
SLP4000H[0]	Reading Seminar 1
SLP4001H	Philosophical and Theoretical Foundations of Communication Sciences
SLP4007H,Y	Reading Seminar 2

[0] 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
Harrak, Amir - MA, LTh, PhD
Harris, Jennifer - BA, MA, PhD

Hewitt, Marsha - BA, MA, PhD
Hill, Susan - PhD
Jain, Kajri - PhD
Jervis, Ann - BA, MDiv, DTh
Kasturi, Malavika - DPhil
Khan, Abrahim - 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
Tavakoli-Targhi, Mohamad - BA, MA, PhD
Terpstra, Nicholas - BA, MA, PhD
Turner, Dale - 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
Graheli, 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.

Religion

RLG1000H	Anthropology of Religion Gateway Seminar
RLG1000Y	Method and Theory in the Study of Religion
RLG1002H	Philosophy of Religion Gateway Seminar
RLG1003H	Islamic Studies Gateway Seminar
RLG1004H	Religions of Mediterranean Antiquity Gateway Seminar
RLG1200H	The MA Method and Theory Workshop
RLG1501H	Directed Reading
RLG1502H	Directed Reading
RLG2000Y	Major Research Paper

RLG2010H	Religion and Liberalism
RLG2011H	Natural Law in Judaism and Christianity I
RLG2015H	Comparing Religion
RLG2016H	Radical Evil: Religious, Philosophical, and Psychological Response
RLG2017H	Religion, Secularism, and the Public Sphere
RLG2020H	Early Christianity, Ancient Judaism, Ancient "Magic"
RLG2021H	Mystical Poetics and the Study of Religious Aesthetics
RLG2022H	Religion, Mourning, and Trauma
RLG2023H	Religion, Media, and Culture
RLG2025H	Critical Theory of Religion
RLG2027H	Law and Religion: Critical Conversations
RLG2030H	Historiography of Religion
RLG2042H	Re-Enchanting Nature: Spirituality and the New Nature Writing
RLG2060H	Religion and Philosophy in the European Enlightenment
RLG2061H	Why Philosophy Matters to Religious Studies
RLG2062H	Modern Hermeneutics and Religion
RLG2064H	Constructing Religion
RLG2065H	Philosophical Texts in Religion
RLG2067H	Philosophical Topics in the Study of Religion
RLG2072H	Kant’s Theory of Religion
RLG2081H	Foundations in Psychodynamic Theory and Clinical Practice
RLG2084H	Social Science Approaches to Early Christianity: Topical Investigations
RLG2086H	Fieldwork in Religious Studies
RLG3114H	Christianity and Judaism in Colonial Context
RLG3143H	Hebraica
RLG3190H	Pseudepigraphy in Ancient Mediterranean Religion
RLG3200H	The Politics of Bible Translation
RLG3212H	Martyrdom in Early Christianity
RLG3216H	Christianity in the Ancient Near East
RLG3217H	Social Networks and Elective Cults in Antiquity
RLG3228H	Social History of the Early Jesus Movement
RLG3241H	Galatians
RLG3242H	Christian Asceticism in Late Antiquity
RLG3243H	The Synoptic Problem
RLG3249H	Studies in the Synoptic Gospels
RLG3250H	Heresy and Deviance in Early Christianity
RLG3290H	Words and Worship in Christian Cultures
RLG3401H	Reading Buddhist Texts I
RLG3402H	Reading Buddhist Texts II
RLG3413H	Burmese Religions
RLG3419H	Teaching Buddhism
RLG3454H	Readings in Tibetan Buddhism I
RLG3460H	Sanskrit Readings
RLG3461H	Sanskrit Readings II
RLG3468H	The Buddhist Canon
RLG3490H	Buddhist Auto/biography
RLG3501H	Special Topics in Islamic Studies
RLG3516H	Islamic Law and Society
RLG3517H	Shiʿi Studies: The State of the Field
RLG3518H	Foundations in Shi’I Studies
RLG3519H	Islamic Intellectual Traditions
RLG3527H	The Anthropology of Islam
RLG3528H	Tools of the Craft: Research Fluency in Islamic Studies
RLG3544H	Islamicate Material Cultures
RLG3555H	The Prophetic Family in Islamic Tradition
RLG3601H	Philo: The First Jewish Philosopher
RLG3610H	Wisdom in Second Temple Judaism
RLG3611H	Hebrew Literature and Religion: Midrash Aggadah
RLG3621H	Modern Jewish Thought
RLG3622H	Maimonides and His Modern Interpreters
RLG3634H	Worship and Scripture at Qumran
RLG3645H	The Jewish Legal Tradition
RLG3647H	Early Rabbinic Judaism
RLG3653H	Jewish Exegetical Traditions in Antiquity
RLG3700H	Debates in Ancient Indian Religion and History
RLG3701H	Vaishnavism
RLG3702H	Debates in Classical South Asian Religion and History
RLG3704H	Readings in Sanskrit Literature
RLG3710H	Newar Religion
RLG3717H	Renunciation and Erotica in Sanskrit Poetry

RLG3718H	Sikhs in Early Modern India: Texts and Encounters
RLG3722H	Approaching the Literary in South Asian Religions
RLG3744H	Hindu Epics
RLG3760H	Vedanta Through the Ages
RLG3763H	Readings in Sanskrit Philosophy
RLG3771H	After the Śaiva Age: Regional Śaivism in the Second Millenium
RLG3789H	Burmese Buddhist Literature
RLG3799H	Problems and Methods in South Asian Religions
RLG3931H	Topics in North American Religions
RLG4001H	Directed Reading: TST Seminar
RLG4004H	Colloquium Presentation
SRD4444Y	Doctoral Seminar Series — Compulsory Attendance (Credit/No Credit)

Joint Courses

JPR2051H	Fanaticism: A Political History
JPR2058H	Post-secular Political Thought: Religion, Radicalism, and the Limits of Liberalism

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

Slavic Languages and Literatures

Slavic Languages and Literatures: Introduction

Faculty Affiliation

Arts and Science

Degree Programs

Slavic Languages and Literatures

MA and PhD

- Fields:
  - Slavic Linguistics;
  - Slavic Literatures

Collaborative Specializations

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

- Diaspora and Transnational Studies
  - Slavic Languages and Literatures, MA, PhD
- Jewish Studies
  - Slavic Languages and Literatures, MA, PhD
- Sexual Diversity Studies
  - Slavic Languages and Literatures, MA, 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.

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, Constantin - 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

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.

Program Length

2 sessions (typical registration sequence: F/W)

Time Limit

3 years

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

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.

Program Length

4 sessions (typical registration sequence: F/W/F/W)

Time Limit

3 years

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 of study** 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

SLA1010H	Slavic Proseminar
SLA1039H	Kyiv-Kiev-Kijow: A City and the Text
SLA1040H	Methods of Teaching Slavic Languages
SLA1050H	Theatricality and Spectacle in the History of Russian Culture. From Jesters to Meyerhold.
SLA1207H	The Imaginary Jew
SLA1320H	Postcommunism — Postcolonialism — Postdependence: Central and Eastern European Perspectives
SLA1330H	Literature and Science
SLA1340H	Desires, Dreamscapes, and the Death Drive: Psychoanalysis and Literature
SLA1405H	Contemporary East European Cinemas
SLA1421H	Women in East European Fiction
SLA1521H	Post-Modernity and the Mythopoetic Legacy of Mitteleuropa
SLA2000Y	Reading and Research
SLA2001H	One Term Reading and Research
COL5037H	Magic Prague: Question of Literary Cityscapes
JLV5134H	Theories of the Novel
JLV5135H	1968: The Year of Revolution and Protest
JLV5143H	Censorship, Culture, Archive

Croatian and Serbian Literatures

SLA1507H	Modern Croatian Bards in Performance
SLA1517H	Modern Serbian Bards
SLA1547H	South Slavic Folklore

Czech and Slovak Literature

SLA1600Y	Introduction to Czech and Slovak Literatures
SLA1602Y	Czech Style and Syntax
SLA1604Y	History of Czech Verbal Art from the Early Stages to Baroque
SLA1610H	V. Havel: Thinker, Politician, Writer

Polish Literature

SLA1304H	Transgressions: Drama, Theatre, Performance
SLA1308H	Critical Paradigms in Polish Culture
SLA1312Y	Modernism and Post-Modernism in Polish Literature
SLA1315H	Intellectual Traditions, Culture, and Literature: Trajectories in Poland

Russian Literature

SLA1202H	Gulag Literature
SLA1203H	The Self and Other in Russian Prose
SLA1204H	Contemporary Russian Literature
SLA1207H	The Imaginary Jew
SLA1210H	Studies in Medieval Russian Literature
SLA1211Y	Studies in the Russian Drama: Eighteenth to Twentieth Century
SLA1215H	Studies in Russian Literature and Criticism in the Eighteenth Century
SLA1216H	From English to Russian Literature and Back
SLA1218H	Pushkin
SLA1220H	Nineteenth Century Russian Thinkers
SLA1222Y	Russian Poetry and Poetics
SLA1223H	Introduction to Russian Poetry and Poetics
SLA1224H	19th-Century Russian Poetry
SLA1225H	Russian Literature in the Age of Empire
SLA1226H	Dostoevsky in Literary Theory and Criticism
SLA1228H	Themes in Russian Realism
SLA1229H	Russian Literature Between Tradition and Modernity (exclusion: SLA1225H)
SLA1231H	Russian Modernism
SLA1234H	Dostoevsky
SLA1238H	Chekhov
SLA1239H	Vladimir Nabokov
SLA1240H	Tolstoy
SLA1410H	Gogol
SLA1411H	Synthesis of Arts in the Late Russian Empire–Early Soviet Union
SLA1900H	Russian Nineteenth-Century Poetry

Slavic Linguistics

SLA1040H	Methods of Teaching Slavic Languages
SLA1041Y	Advanced Training in Slavic Languages I
SLA1042Y	Advanced Training in Slavic Languages II
SLA1102Y	Advanced Russian Language Skills
SLA1104H	Introduction to Old Church Slavonic (Credit/No Credit)
SLA1109H	Studies in Old Church Slavonic
SLA1141H	History of the Ukrainian Language
SLA1142H	Style and Structure of Ukrainian
SLA1150H	Russian Since the Revolution

Russian Language

SLA1101Y	History of the Russian Language
SLA1102Y	Advanced Russian Language Skills

Ukrainian Literature/Language

SLA1141H	History of Ukrainian Language
SLA1142H	Style and Structure of Ukrainian
SLA1402Y	Studies in Ukrainian Modernism
SLA1403Y	Contemporary Ukrainian Literature
SLA1404Y	Studies in Ukrainian Poets
SLA1406Y	Studies in Ukrainian Literary Criticism
SLA1407H	Aspects of Literary Translation of Ukrainian

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, Francophonies 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 of Social Justice Education offers a multi- and interdisciplinary graduate program developed from the past programs of History and Philosophy of Education as well as Sociology and Equity Studies in Education. It is an intellectual community committed to producing and advancing knowledge on social justice education in Canada and beyond. Social justice education is a robust term, allowing for diverse meanings and methodologies.

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
Wane, Njoki - BE, MSc, MEd, 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.

- 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.
- **Major Research Paper (MRP)**: SJE2001Y[0] *Major Research Paper*.

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

[0] Course that may continue over a program. The course is graded when completed.

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

SJE1900H	Introduction à la sociologie de l'éducation
SJE1900H	Introduction to Sociology in Education
SJE1902H	Introductory Sociological Research Methods in Education
SJE1903H	Major Concepts and Issues in Social Justice Education

SJE1905H	Qualitative Approaches to Sociological Research in Education
SJE1909H	Environmental Sustainability and Social Justice 1
SJE1912H	Foucault and Research in Education and Culture: Discourse, Power, and the Subject
SJE1919H	Advanced Topics in Environmental Justice Education
SJE1921Y	The Principles of Anti-Racism Education
SJE1922H	Sociology of Race and Ethnicity
SJE1923H	Racism, Violence, and the Law: Issues for Researchers and Educators
SJE1924H	Modernization, Development, and Education in African Contexts
SJE1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SJE1925H	Savoir indigène et décolonization
SJE1926H	Race, Space, and Citizenship: Research Methods
SJE1927H	Migration and Globalization
SJE1929H	Theorizing Asian Canada
SJE1930H	Race, Indigeneity, and the Colonial Politics of Recognition
SJE1931H	Centering Indigenous-Settler Solidarity in Theory and Research
SJE1932H	Decolonization, Settler Colonialism, and Antiblackness (exclusion: SJE5024H)
SJE1933H	Participatory Action Research and Community Based Research (exclusion: SJE5011H)
SJE1951H	L'école, la participation parentale et la communauté
SJE1951H	The School and the Community
SJE1954H	Marginality and the Politics of Resistance
SJE1956H	Social Relations of Cultural Production in Education
SJE1957H	Disability Studies: An Introduction
SJE1958H	The Cultural Production of the Self as a Problem in Education
SJE1959H	Theoretical Frameworks in Culture, Communications, and Education
SJE1961H	Spirituality and Schooling
SJE1970H	Applied Ethics in Higher Education
SJE1971H	Identity and Education
SJE1972H	Contemporary Ethical Issues in Schooling and Education
SJE1973H	Liberalism and its Critics
SJE1974H	Truth Commissions Reconciliation and Indian Residential Schools
SJE1975H	Indigenous Settler Relations Issues for Teachers
SJE1976H	Critical Media Literacy Education
SJE1977H	Sociology of Indigenous and Alternative Approaches to Health and Healing Practices: Implications for Education
SJE1978H	Sexual, Racial, and Gender-Based Violence Prevention in Higher Education
SJE1979H	Race, Gender, Sexuality, and Empire in Socialist Economies and States
SJE1982H	Women, Diversity, and the Educational System
SJE1989H	Black Feminist Thought
SJE1993H	Militarism and Sustainability: Concepts of Nature, State, and Society
SJE2001Y[0]	Major Research Paper
SJE2030H	Disability Studies and the Human Imaginary (exclusion: SJE5004H)
SJE2929H	Disability Studies — Interpretive Methods — RM (exclusion: SJE3929H)
SJE2941H	Bourdieu: Theory of Practice in Social Sciences
SJE2998H	Individual Reading and Research in Social Justice Education: Master's
SJE5000H	Special Topics in Social Justice Research in Education: Master's Level
JTE1952H	Language, Culture, and Education / Langue, culture, et éducation

[0] 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.

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'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

SJE1440H	An Introduction to Philosophy of Education
SJE1979H	Race, Gender, Sexuality, and Empire in Socialist Economies and States
SJE2929H	Disability Studies — Interpretive Methods — RM (exclusion: SJE3929H)
SJE3417H	Research Seminar in Feminist Criticism, Aesthetics, and Pedagogy
SJE3903H	SJE Learning to Succeed in Graduate School
SJE3905H	Interdisciplinary Approaches to Research: Theory and Praxis
SJE3911H	Cultural Knowledges, Representation, and Colonial Education
SJE3912H	Race and Knowledge Production: Research Methods
SJE3914H	Anti-Colonial Thought and Pedagogical Challenges
SJE3915H	Franz Fanon and Education
SJE3916H	Women in Leadership Positions: Intersectionalities and Leadership Practices; Sociological Implications in Education
SJE3917H	Indigenous Land Education and Black Geographies (prerequisite: any prior Indigenous and/or Black Studies course(s); exclusion: SJE5007H)
SJE3933H	Globalisation and Transnationality: Feminist Perspectives
SJE3934H	Advanced Indigenous Feminist Research (prerequisite: prior coursework in Indigenous studies, women and gender studies; exclusion: SJE6000H)
SJE3997H	Practicum in Social Justice Education
SJE3998H	Individual Reading and Research in Sociology Justice Education
SJE6000H	Special Topics in Social Justice Research in Education: Doctoral Level
JSA5147H	Language, Nationalism, and Post-Nationalism

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
- Health Services and Policy Research
  - Social Work, PhD
- Public Health Policy
  - Social Work, MSW, PhD
- Sexual Diversity Studies
  - Social Work, MSW, PhD
- Women and Gender Studies
  - Social Work, MSW, PhD
- Women's Health
  - 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

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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
Chambon, Adrienne - BA, PhD
Gadalla, 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
Fleischer, 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
Wehbi, 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.

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.

SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4103H	Elements of Social Work Practice
SWK4105H	Social Work Practice Laboratory
SWK4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK4510H	Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)
SWK4602H	Social Work Practice with Groups
SWK4605H	Social Work Practice with Individuals and Families
SWK4654H	Social Work Practice in Organizations and Communities
SWK4701H[+]	Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)

[+] *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.

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 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

SWK4514H	Research for Practice with Children and their Families
SWK4608H	Social Work Practice with Families
SWK4620H	Social Work Practice with Children and Adolescents
SWK4625H	The Intersection of Policy and Practice with Children and their Families
SWK4702Y	Social Work Practicum II (full credit)

- **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

Social Work: Social Work MSW; Field: Gerontology

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.

SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4103H	Elements of Social Work Practice
SWK4105H	Social Work Practice Laboratory
SWK4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK4510H	Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)
SWK4602H	Social Work Practice with Groups
SWK4605H	Social Work Practice with Individuals and Families
SWK4654H	Social Work Practice in Organizations and Communities
SWK4701H[+]	Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)

[+] *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

AGE2000H	Principles of Aging
SWK4513H	Knowledge Building in Social Work
SWK4612Y	Social Work and Aging: Integrated Policy and Practice (full credit)
SWK4618H	Special Issues in Gerontological Social Work
SWK4702Y	Social Work Practicum II (full credit)

- **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

SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4103H	Elements of Social Work Practice
SWK4105H	Social Work Practice Laboratory
SWK4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK4510H	Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)
SWK4602H	Social Work Practice with Groups
SWK4605H	Social Work Practice with Individuals and Families
SWK4654H	Social Work Practice in Organizations and Communities
SWK4701H[+]	Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)

[+] *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

SWK4412H	The Context of Mental Health and Health Practice
SWK4511H	Practice-Based Research in Mental Health and Health
SWK4702Y	Social Work Practicum II (full credit)

- Plus students can then elect to take **one** of three choices:
  - SWK4622H *Social Work Practice in Health* and SWK4604H *Social Work Practice in Mental Health*
  - SWK4622H *Social Work Practice in Health* followed by SWK4632H *Advanced Social Work Practice in Health* (prerequisite: SWK4622H)
  - 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.

SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4103H	Elements of Social Work Practice
SWK4105H	Social Work Practice Laboratory
SWK4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK4510H	Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)
SWK4602H	Social Work Practice with Groups
SWK4605H	Social Work Practice with Individuals and Families
SWK4654H	Social Work Practice in Organizations and Communities
SWK4701H[+]	Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)

[+] *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

SWK4425H	Human Services Management and Leadership
SWK4426H	Financial Management and Leadership in Human Service Organizations
SWK4427H	Human Resource Management in Human Service Organizations

SWK4515H	Research and Quality Improvement in Human Service Organizations
SWK4702Y	Social Work Practicum II (full credit)

- **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

SWK4101H	Understanding Historical and Multigenerational Trauma
SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4106H	Social Work Ethics and Indigenous Communities
SWK4108H	Sexual Abuse, Sexual Assault, and the Family
SWK4109H	Trauma and Human Development
SWK4110H	Trauma and Addiction
SWK4111H	Trauma-Informed Schools, Community Intervention, and the Healing Power of Ceremony
SWK4510H	Research for Evidence-Based Social Work Practice
SWK4516H	Indigenous Trauma and Resiliency Practicum

Year 2 Courses

SWK4517H	Indigenous and Participatory Research Methods

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.

SWK4102H	Social Policy and Social Welfare in the Canadian Context
SWK4103H	Elements of Social Work Practice
SWK4105H	Social Work Practice Laboratory
SWK4107H	Foundations of Social Work: Knowledge, Theory, and Values that Inform Practice
SWK4510H	Research for Evidence-Based Social Work Practice (SWK4510H must be completed before taking any of the research courses in the field)
SWK4602H	Social Work Practice with Groups
SWK4605H	Social Work Practice with Individuals and Families
SWK4654H	Social Work Practice in Organizations and Communities
SWK4701H[+]	Social Work Practicum I (prerequisite: SWK4105H completed prior to beginning practicum)

[+] *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

SWK4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK4512H	Research Knowledge for Social Justice
SWK4606H	Diversity, Access, and Equity in Social Work Practice
SWK4702Y	Social Work Practicum II (full credit)

- **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 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.

AGE2000H	Principles of Aging
EIP3000H	Coordinating Seminar: Ethnic, Immigration and Pluralism Studies
PAS3700H	Multidisciplinary Aspects of Addictions
SWK4210H	Promoting Empowerment: Working at the Margins
SWK4417H	Adolescence: Social Work Challenges and the Role of Social Work
SWK4420H	Human Rights and Social Justice
SWK4422H	Social Housing and Homelessness
SWK4506H	Applied Quantitative Data Analysis
SWK4516H	Indigenous Trauma and Resiliency Practicum
SWK4610H	Advanced Social Work Practice with Couples
SWK4614H	Social Work Practice in Palliative Care
SWK4615H	Cognitive Behavioural Theories and Clinical Social Work Practice
SWK4616H	Drug Dependencies: Interventive Approaches
SWK4619H	Family Mediation: Theory and Practice
SWK4623H	Violence in Families: Multilevel Intervention in Interdisciplinary Practice
SWK4624H	Feminist Social Work Practice

SWK4629H	Social Work Practice and Aboriginal Peoples
SWK4634H	Family Practice Across the Life Cycle
SWK4636H	Special Topics in Mental Health Social Work
SWK4637H	Special Topics in Health Social Work
SWK4638H	Social Work Practice in Children's Mental Health
SWK4639H	Special Topics in Child and Family Social Work
SWK4640H	Special Topics in Mental Health Social Work II
SWK4641H	Special Topics in Social Work in Gerontology
SWK4642H	Special Topics in Human Services Management and Leadership
SWK4643H	Special Topics in Social Justice and Diversity
SWK4645H	Special Topics in Children and their Families II
SWK4646H	Special Topics in Human Services Management and Leadership II (modular course)
SWK4647H	Family-Centred Practices in Addictions and Mental Health
SWK4658H	Social Work with Immigrants and Refugees
SWK4667H	Information Technology in Professional Social Work Practice
SWK4668H	Welfare of Children
SWK4669H	Psychodynamic Theories and Clinical Social Work Practice
SWK4670H	Cybercounselling and Social Work Practice
SWK4671H	Neuroscience and Social Work Practice
SWK4673H	Mindfulness Therapy and Social Work Practice

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.

SWK4801H	Special Studies I
SWK4802H	Special Studies II
SWK4803H	Special Studies III
SWK4804H	Special Studies IV

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.

- 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

SWK6301H	Intermediate Statistics and Data Analysis (prerequisite: SWK4506H or pass a competency exam)
SWK6302H	Epistemology and Social Work Research
SWK6307H	Designing and Implementing Qualitative Social Work Research
SWK6308H	Designing and Implementing Quantitative Social Work Research
SWK7000H	Doctoral Thesis Seminar (Credit/No Credit)
SWK8000H	Comprehensive Exam (Credit/No Credit)

Recommended Course

SWK4506H	Applied Quantitative Data Analysis (prerequisite for SWK6301H; students who pass a competency exam will be exempted from taking SWK4506H)

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.

SWK6006H	Theory and Practice of Teaching Social Work
SWK6007H	Advanced Qualitative Research Methods in Social Work
SWK6101H	Critical Evaluation of Social Work Practice Theories
SWK6106H	Family Mediation: Research and Practice
SWK6203H	Comparative Social Welfare Systems
SWK6205H	Social Planning in Social Welfare
SWK6401H	Sociocultural Issues in Social Work
SWK6406H	Housing Theory and Research Methods

These courses are designed to provide seminars or tutorials according to the particular interests of students enrolled:

SWK6501H	Special Studies 1
SWK6502H	Special Studies 2
SWK6503H	Special Studies 3
SWK6504H	Special Studies 4

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

Social Work: Social Work Advanced Diploma in Social Service Administration Courses

Compulsory Courses

SWK4425H	Leadership Skills in Social Service Organizations
SWK4426H	Financial Management of Social Service Organizations
SWK4427H	Human Resource Management in Social Service Organizations
SWK4515H	Research and Quality Improvement in Human Service Organizations

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.

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
Hannah-Moffat, Kelly - BA, MA, 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

Salem, Rania Hatem - BSc, MSS, PhD
Sarkar, Mahua - BA, MA, PhD
Schafer, Markus - BA, MS, PhD ***(Graduate Coordinator)***
Schieman, Scott - BA, MA, PhD
Schneiderhan, Erik - PhD
Silver, Daniel - BA, MA, PhD
Tanner, Julian - DipEd, BSc, MA, PhD
Taylor, Judith - BA, PhD
Tepperman, Lorne - BA, MA, PhD
Veugelers, Jack - PhD
Welsh, Sandy - BA, MA, PhD
Wheaton, Blair - PhD
Zhang, Weiguo - PhD

Members Emeriti

Blute, Marion - BA, MA, PhD
Breton, Raymond - BA, MA, PhD
Brownfield, David - PhD
Campbell, Douglas - BA, MA, PhD
Friedmann, Harriet - AB, MA, PhD
Gartner, Rosemary - BA, AA, MS, PhD
Gillis, Ronald - BA, MA, PhD
Hagan, John - BA, MA, PhD
Harvey, Edward - BA, MA, PhD
Howell, Nancy - BA, PhD
Isajiw, Wsevolod - BA, MA, PhD
Jones, Charles - BA, MA, PhD
Michelson, William - AB, AM, PhD
Simpson, John - BA, BD, MTh, PhD
Spencer, Metta - AB, MA, PhD
Ungar, Sheldon - BA, MA, PhD
Zeitlin, Irving - BA, MA, PhD
Associate Members
Alegria, Sharla - AM, PhD
Alexander, Monica - MA, PhD
Baker, Jayne - MA, PhD
Boeckmann, Irene - PhD
Caron, Christian - BA, MA, PhD
Elcioglu, Emine Fidan - BA, MA, PhD
Fosse, Ethan - BA, AM, PhD
Gray, Robin - BA, MA, PhD
Grigoryeva, Angelina - BA, PhD
Haag, Julius - BA, MA
Hoffman, Steve - BA, PhD
Horowitz, Jonathan - BA, MS, MA, PhD
Innocente, Nathan - BA, MA, MA
Liddle, Kathy - BA, AM, PhD
Richer, Zachary - BA, MA, MA, PhD
Silver, Michelle - BA, BS, MA, PhD
Smith, Chris - BA, PhD
Spence, Nicholas David - BA, PhD
Wodtke, Geoffrey - BA, MA, 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

• SOC6001H	• Sociological Theory I
• SOC6101H	• Sociological Theory II
• SOC6201H	• Sociological Theory III

• 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
SOC6209H	Ethnicity III

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

SOC6212H	Work, Stratification, and Markets III
SOC6312H	Work, Stratification, and Markets IV

Other Courses

SOC6021Y	Sociology and the Policy Process in Canada
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-Lynn - 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, 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

Time Limit

3 years full-time;
6 years 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.

SPA1053H	History of the Spanish Language
SPA1080H	Descriptive Grammar of Spanish
SPA1082H	Sociolinguistics of Spanish
SPA1083H	Microvariation in Spanish
SPA1084H	Experimental Approaches to Hispanic Linguistics
SPA1088H	Spanish Syntax
SPA1089H	Spanish Morphosyntax
SPA1090H	Second Language Speech Learning
SPA1091H	Second Language Acquisition of Portuguese and Spanish

SPA1092H	Portuguese and Spanish Semantics
SPA1093H	Linguistics in Spanish
SPA1094H	Spanish Bilingualism
SPA1097H	Second-Language Teaching and Methodology
SPA1101H	Topics in the Acquisition of Spanish
SPA1104H	Experimental Approaches to Sound Variation and Change
SPA1105H	Spanish Intonation
SPA1150H	Directed Research in Hispanic Linguistics
SPA2016H	Medieval Spanish Narrative
SPA2018H	Poetics of Early Drama
SPA2052H	Graphic Legacy of Celestina: Visual Culture and Social Studies
SPA2060H	Literature and Society of Castile in the Late Middle Ages and Early Renaissance
SPA2121H	Psychoanalysis and the Passions in Early Modern Literature
SPA2150H	Defining Journeys in the Spanish Empire
SPA2152H	Cervantes' Don Quixote
SPA2160H	Transatlantic Hispanic Baroque
SPA2284H	Narrative and Political Transition in Spain
SPA2291H	The Urban Experience in Spain
SPA2292H	New Ruralism and Spain
SPA2304H	Latin American Cinema
SPA2305H	Auteurism in Spanish Cinema
SPA2352H	Modern Spanish Drama and its Traditions
SPA2404H	The Latin American Novel
SPA2406H	Latin American Narratives of Resistance
SPA2411H	Latin American Icons and the Sensory Work of Objects
SPA2412H	Disease Stories: Race, and Fears of Contagion in Latin America
SPA2415H	Disability and Latin American Cultural Production
SPA2424H	Spanish American Poetry and Poetics
SPA2425H	21st Century Latin American Art and Culture
SPA2432H	Text and Image in Latin American Culture
SPA2802H	The Politics of Errantry in the Hispanic Caribbean
SPA2805H	Representations of Women in Latin American Culture
SPA2900H	Issues in Literary Theory and Hispanic Texts
SPA2905H	Latin American Cultural Theories
SPA2940H	Pursuing the Post-Revolution: Literature and Philosophy of Mexicanidad
SPA2947H	Transparency and Politics in Contemporary Mexican Literature
SPA3000H	Directed Research in Hispanic Literatures
SPA3300H	Hispanic Literature and Linguistics Research Forum (Credit/No Credit)
JOS5019H	Cervantes and Renaissance Humanism
JOS5029H	Reading Cervantes
JRL1101H	Topics in Romance Laboratory Phonetics and Phonology I: Theory

Speech-Language Pathology

Speech-Language Pathology: Introduction

Faculty Affiliation

Medicine

Degree Programs

Speech-Language Pathology

MHSc

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
Rehabilitation Sciences Building
#160-500 University Avenue
Toronto, Ontario M5G 1V7
Canada

Speech-Language Pathology: Graduate Faculty

Full Members

Beal, Deryk - BA, MHSc, PhD
Bressmann, 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(CD), 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

SLP1500Y	Internship (Credit/No Credit)
SLP1502Y	Anatomy and Embryology
SLP1503Y	Articulation and Related Disorders
SLP1505Y	Child Language I
SLP1506H	Child Language II
SLP1507H	Clinical Laboratory in Speech-Language Pathology
SLP1514Y	Applied Audiology
SLP1516H	Aural Rehabilitation
SLP1520H[+]	Principles of Clinical Practice
SLP1521H	Augmentative Communication
SLP1522Y	Speech Physiology and Acoustics
SLP1529H	Fluency Disorders
SLP1530H	Voice Disorders
SLP1532H[0]	Clinical Laboratory in Hearing Disorders (Credit/No Credit)
SLP1539H[0]	Capstone Portfolio

[+] 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

SLP1508Y	Advanced Clinical Laboratory in Speech-Language Pathology

SLP1525H	Structurally Related Disorders
SLP1527H[+]	Clinical Analysis of Communication and Swallowing Disorders
SLP1528H[+]	Research in Speech-Language Pathology
SLP1533Y	Aphasia
SLP1534H	Motor Speech Disorders
SLP1535H[+]	Advanced Principles of Clinical Practice
SLP1536H	Swallowing Disorders
SLP1538H	Neurocognitive Communication Disorders
SLP2500Y	Advanced Internship

[+] *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:
  - Statistical Theory and Applications;
  - Probability

PhD

- Fields:
  - Statistical Theory and Applications;
  - Probability;
  - 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

Web: www.mfi.utoronto.ca
Email: mfi.info@utoronto.ca
Telephone: (416) 978-7420

Department of Statistical Sciences
Faculty of Arts & Science, University of Toronto
Ontario Power Building, 700 University Avenue, 9th Floor
Toronto, Ontario M5G 1Z5
Canada

MSc and PhD Programs

Web: www.statistics.utoronto.ca
Email: grad.statistics@utoronto.ca
Telephone: (416) 978-8838
Fax: (416) 978-5133

Department of Statistical Sciences
Faculty of Arts & Science, University of Toronto
Ontario Power Building, 700 University Avenue, 9th Floor
Toronto, Ontario M5G 1Z5
Canada

Statistical Sciences: Graduate Faculty

Full Members

Alexander, Monica - MA, PhD
Alexander, Rohan Peter - MEc, 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, PhD
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
Wang, Linbo - BS, 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).
  - Any one of Statistical Sciences' 0.25 FCE 4000-level graduate course offerings with significant financial, insurance, or data science components, with approval of the MFI program director.
  - 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

STA2503H	Applied Probability for Mathematical Finance
STA2530H	Applied Time-Series Analysis
STA2535H	Life Insurance Mathematics
STA2536H	Data Science for Risk Modelling
STA2550H[+]	Industrial Seminar Series

Winter Session

STA2540H	Insurance Risk Management

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*
  - STA2211H *Probability Theory II*
  - STA2112H *Mathematical Statistics I*
  - STA2212H *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 be 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 are required to complete the following 3.0 full-course equivalents (FCEs):
  - STA2111H *Probability Theory I*.
  - STA2211H *Probability Theory II*.
  - STA2101H *Methods of Applied Statistics I*.
  - STA2201H *Methods of Applied Statistics II*.
  - STA3000Y *Advanced Theory of Statistics*.

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 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 are required to complete the following 3.0 full-course equivalents (FCEs):
  - STA2111H *Probability Theory I*.
  - STA2211H *Probability Theory II*.
  - STA2101H *Methods of Applied Statistics I*.
  - STA2201H *Methods of Applied Statistics II*.
  - STA3000Y *Advanced Theory of Statistics*.
- 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.
  - 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.
  - 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 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 be 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):
  - All of:
    - STA2111H *Probability Theory I*,
    - STA2211H *Probability Theory II*, and
    - STA2503H *Applied Probability for Mathematical Finance*.
  - One of:
    - STA4246H *Research Topics in Mathematical Finance* ***or***
    - STA2501H *Mathematical Risk Theory*.
  - Either:
    - STA3000Y *Advanced Theory of Statistics* ***or***

- 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.
  - 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.
  - 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 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.

STA1001H	Applied Regression Analysis
STA1002H	Methods of Data Analysis
STA1003H	Sample Survey Theory and its Application
STA1004H	Introduction to Experimental Design
STA1007H	Statistics for Life and Social Scientists
JAS1101H	Topics in Astrostatistics
STA2005H	Applied Multivariate Analysis
STA2006H	Applied Stochastic Processes
STA2016H	Theory and Methods for Complex Spatial Data (prerequisite: STA302H1)
STA2051H	Topics in Numerical Methods in Data Science
STA2052H	Statistics, Ethics, and Law
STA2080H	Fundamentals of Statistical Genetics
STA2101H	Methods of Applied Statistics I
STA2102H	Computational Techniques in Statistics
STA2104H	Statistical Methods for Machine Learning and Data Mining
STA2111H	Probability Theory I
STA2112H	Mathematical Statistics I
STA2163H	Online Learning and Sequential Decision Theory
STA2201H	Methods of Applied Statistics II
STA2202H	Time Series Analysis
STA2211H	Probability Theory II
STA2212H	Mathematical Statistics II
STA2453H	Data Science Methods, Collaboration, and Communication
STA2501H	Mathematical Risk Theory
STA2502H	Stochastic Models in Investments
STA2503H	Applied Probability for Mathematical Finance
STA2505H	Credibility Theory and Simulation Methods
STA2530H	Applied Time-Series Analysis
STA2535H	Life Insurance Mathematics
STA2536H	Data Science for Risk Modelling
STA2540H	Insurance Risk Management
STA2546H	Data Analytics in Practice
STA2550H^{+}	Industrial Seminar Series
STA2551H	Finance and Insurance Case Studies
STA2555H	Information Visualization

STA2560Y	Industrial Internship
STA2570H	Numerical Methods for Finance and Insurance
STA2600H	Teaching and Learning of Statistics in Higher Education
STA2700H	Computational Inference and Graphical Models
STA3000Y	Advanced Theory of Statistics
STA3431H	Monte Carlo Methods
STA4000H, Y	Supervised Reading Project I
STA4001H, Y	Supervised Reading Project II
STA4002H	Supervised Reading Project for an Advanced Special Topic
STA4246H	Research Topics in Mathematical Finance
STA4273H	Research Topics in Statistical Machine Learning
STA4364H	Conditional Inference: Sample Space Analysis
STA4372H	Foundations of Statistical Inference
STA4412H	Topics in Theoretical Statistics Modular Courses

Note: The following **modular** courses are each worth **0.25 full-course equivalent (FCE)**.

STA4500H	Statistical Dependence: Copula Models and Beyond
STA4501H	Functional Data Analysis and Related Topics
STA4502H	Topics in Stochastic Processes
STA4505H	Applied Stochastic Control: High Frequency and Algorithmic Trading
STA4506H	Non-stationary Time Series Analysis
STA4507H	Extreme Value Theory and Applications
STA4508H	Topics in Likelihood Inference
STA4509H	Insurance Risk Models I
STA4510H	Insurance Risk Models II
STA4512H	Logical Foundations of Statistical Inference
STA4514H	Modelling and Analysis of Spatially Correlated Data
STA4515H	Multiple Hypothesis Testing and its Applications
STA4516H	Topics in Probabilistic Programming
STA4517H	Foundations and Trends in Causal Inference
STA4518H	Robust Statistical Methods (prerequisite: STA2112H or permission)
STA4519H	Optimal Transport: Theory and Algorithms (prerequisites: STA2111H and STA2211H, or permission by the instructor)
STA4522H	The Measurement of Statistical Evidence
STA4523H	Bayesian Computation with Massive Data and Intractable Likelihoods
STA4524H	Advanced Topics in Statistical Genetics
STA4525H	Demographic Methods
STA4526H	Stochastic Control and Applications in Finance
STA4527H	Random Matrix Theory and Its Applications
STA4528H	Dependence Modelling With Application to Risk Management
STA4529H	Applications of Nonstandard Analysis to Statistics and Probability Theory
STA4530H	Derivatives for Institutional Investing

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

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
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
Dehli, Kari - BA, MA, PhD
Diaz, Robert - PhD

Fox, Bonnie - AB, PhD
Georgis, Dina - PhD ***(Graduate Coordinator)***
Johnson, Chris - PhD
Keith, Alison - BA, MA, PhD, FRSC
Klassen, Pamela - BA, MA, PhD
Kuokkanen, Rauna - MA, MA, PhD
Larkin, June - PhD
Larson, Katie - BMus, AB, MPH, PhD
Lo, Marieme - BA, MA, MSc, PhD
Lord, R. Cassandra - BA, BA, MA, PhD
Magnusson, Jamie-Lynn - BA, MA, PhD
McElhinny, Bonnie - BA, MA, MA, PhD, PhD
Miles, Angela - BA, MA, PhD
Mirchandani, Kiran - BA, MPH, PhD
Mojab, Shahrzad - BA, MEd, EdD
Morgenstern, Naomi - BA, MA, PhD
Murphy, Michelle - BA, PhD
Murray, Heather - BA, MA, PhD
Newton, Melanie - BA, PhD
Nyquist, Mary - BA, MA, PhD
Rankin, Katharine - BA, MA, PhD
Razack, Sherene - BA, MA, PhD
Recollet, Karyn - PhD
Rittich, Kerry - BAMus, LLB, SJD ***(Graduate Coordinator)***
Ruddick, Susan - PhD
Salih, Sara - BA, DPhil
Silvey, Rachel - BA, MA, PhD
Song, Jesook - BA, PhD
Sykes, Heather - BSc, PhD
Tahmasebi-Birgani, Victoria - MA, PhD
Taylor, Judith - BA, PhD
Titchkosky, Tanya - BA, MA, PhD
Trotz, Alissa - AB, MPH, PhD ***(Director)***
Tuck, Eve - BA, PhD
Valverde, Mariana - BA, MA, PhD, FRSC
Walcott, Rinaldo - BA, MA, PhD
Wane, Njoki - BE, MSc, MEd, PhD
Yoneyama, Lisa - BA, MA, PhD

Associate Members

Desai, Chandni - PhD
Ellapen, Jordache Abner - BA, MA, MA, PhD
Goldstein, Tara - BA, PhD
Murray, David - PhD
Trimble, S. - 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.

The MA program is a full-time program and cannot be taken on a part-time basis.

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.
- An appropriate bachelor's degree in women's studies and gender studies or a related area at an approved university. Applicants must have obtained an average equivalent to a University of Toronto B+ 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, 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. Students must complete a total of **3.5 full-course equivalents (FCEs)** as follows:
  - 0.5 core FCEs in women and gender studies (WGS5000H).
  - 1.0 elective FCE in women and gender studies; either a special topics seminar (please see course list of special topics seminars) or an independent research/reading course (WGS1007H).
  - 1.0 FCE *MA Research Paper* (WGS1005Y).
  - 1.0 FCE (one year-long or two half-year courses) offered by other departments and chosen in consultation with the faculty advisor.
- The MA degree program is not offered on a part-time basis.

Program Length

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

Time Limit

3 years full-time

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**:
  - 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 December 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 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

Women and Gender Studies: Women and Gender Studies MA, PhD Courses

WGS1004H	Special Topics in Feminist Theory
WGS1005Y	MA Research Paper
WGS1007H	Directed Research/Reading
WGS1009H	Special Topics in Feminist Studies 1
WGS1010H	Special Topics in Feminist Studies 2
WGS1011H	Special Topics in Feminist Studies 3
WGS1013H	Special Topics in Feminist Theory 1
WGS1014H	Special Topics in Feminist Theory 2
WGS1016H	Migration, Mobility, and Displacement in Contemporary Africa
WGS1017H	Special Topics in Feminist Studies
WGS1018H	Special Topics in Feminist Studies
WGS1019H	Special Topics in Feminist Studies
WGS1020H	Gender and Globalization: Transnational Perspectives
WGS1021H	Black Diasporic Feminisms: Modernity, Freedom, Belonging
WGS1022H	Special Topics in Feminist Studies
WGS1023H	Studies in Aesthetic Expression and Radical Hope
WGS1024H	Special Topics in Feminist Studies
WGS1025H	Indigenous Aesthetics: Hip Hop, Media, and Futurities
WGS1026H	Special Topics in Race and Feminism
WGS1027H	Special Topics in Queer Studies and Feminism
WGS1028H	Queer of Colour Critique
WGS5000H	Feminist Theories, Histories, Movements I
WGS5001H	Feminist Theories, Histories, Movements II

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 Sociolegal 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

Michael Chaiton, PhD
Associate Professor, Dalla Lana School of Public Health, University of Toronto
33 Russell Street, Toronto, Ontario M5S 2S1
Telephone: 416-535-8501 ext. 34428
Michael.Chaiton@utoronto.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 unit 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

PAS3700H	Multidisciplinary Aspects of Addictions

Elective Courses

APD1291H	Addictive Behaviours: Approaches to Assessment and Intervention
CHL5120H	Population Health Perspectives on Mental Health and Addictions
CHL5417H	Tobacco and Health: From Cells to Society
CRI2040H	Drugs and Crime
JPM1005Y	Behavioural Pharmacology
MSC1085H	Molecular Approaches to Mental Health and Addictions
PAS3701H	Advanced Research Issues in Addictions
SWK4616H	Drug Dependencies: Interventive Approaches

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 resumé 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.

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 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.

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

- 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

AGE2000H	Principles of Aging

Doctoral Level

AGE3000H	Advanced Research Seminar in Aging and the Life Course (AGE2000H is a prerequisite for entry into the doctoral level of the collaborative specialization)

Core Courses for Option 2: Palliative and Supportive Care

Master's Level

AGE1000H	Multidisciplinary Research Concepts in Palliative and Supportive Care

Doctoral Level

AGE1500H	Advanced Research Methodologies in Palliative and Supportive Care (AGE1000H is a prerequisite for entry into the doctoral level of the collaborative specialization)

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.

AGE2500H	Current Research Topics in Aging and the Life Course
DEN1003H	Preventive Dentistry
NUR1057H	Interventions to Enhance Health, Abilities, and Well-Being
SLP1533Y	Aphasia
SLP1534H	Motor Speech Disorders
SOC6707H	Intermediate Data Analysis
SWK4614H	Social Work Practice in Palliative Care (social work students only)
SWK4618H	Special Issues in Gerontological Social Work
SWK4634H	Family Practice Across the Life Cycle
SWK4641H	Special Topics in Social Work in Gerontology
SWK4803H	Special Studies III

Requests to approve other courses as equivalent to fulfil 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

HAD5301H	Introduction to Clinical Epidemiology and Health Care Research
HAD5730H	Economic Evaluation Methods for Health Service Research
HAD5771H	Resource Allocation Ethics
MSC1090H	Introduction to Computational Biostatistics with R
NUR1021H	Nursing Ethics
NUR1024H	Foundations of Qualitative Inquiry
NUR1025H	Doing Qualitative Research: Design and Data Collection
NUR1045H	Theories of Pain: Impact on the Individual, Family, and Society
NUR1046H	Persistent Illness: Theoretical, Research, and Practice Implications
NUR1050H	Coping With Illness
PHL2145H	Bioethics
PHL2146Y	Topics in Bioethics

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 fulfil 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.

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

HAD5011H	Canada's Health Care System and Health Policy
HAD5306H	Introduction to Health Services Research and the Use of Health Administrative Data
HAD5741H	Health Law and Ethics
HAD5768H	International Perspectives on Health Services Management
HAD5771H	Resource Allocation Ethics

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.

LAW6003Y	Health Law and Bioethics
LAW6006H	Public Health Law
LAW582H	Privacy, Property, and the Human Body

Nursing Science

NUR1021H	Nursing Ethics

Philosophy

PHL2131H	Ethics
PHL2132H	Seminar in Ethics
PHL2133H	Topics in Ethics

Public Health Sciences

CHL3001Y	Core Topics in Bioethics
CHL3002Y	Teaching Bioethics
CHL3003Y	Empirical Approaches in Bioethics
CHL3004Y	Ethics and Health Institutions
CHL3051H	Research Ethics
CHL5121H	Genomics, Bioethics, and Public Policy

CHL5401H	Epidemiologic Methods I
JRH5124H	Public Health Ethics

Social Work

SWK6308H	Designing and Implementing Quantitative Social Work Research

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.

BME1010H	Graduate Seminar
BME1011H	Graduate Seminar
BME1405H	Clinical Engineering Instrumentation I
BME1436H	Clinical Engineering Surgery
BME1439H	Clinical Engineering Instrumentation II
BME1453H	Genomics and Synthetic Nucleic-Acid Technologies
BME1454H	Regenerative Medicine: Fundamentals and Applications
BME1457H	Biomedical Nanotechnology
BME1459H	Protein Engineering
BME1460H	Quantitative Fluorescence Microscopy: Theory and Application to Live Cell Imaging
BME1477H	Biomedical Engineering Project Design and Execution
BME1478H	Coding for Biomedical Engineers
BME1480H	Experimental Design and Multivariate Analysis in Bioengineering
BME4444Y	Practice in Clinical Engineering
CHE1107H	Applied Mathematics
CHE1141H	Advanced Chemical Reaction Engineering
CHE1143H	Transport Phenomena
CHE1310H	Chemical Properties of Polymers
DEN1070H	Advances in Dental Materials Science
DEN1081H	Bone Interfacing Implants
ECE1228H	Electromagnetic Theory
ECE1352H	Analog Circuit Design I
ECE1475H	Bio Photonics
ECE1502H	Information Theory
ECE1511H	Signal Processing
ECE1521H	Detection and Estimation Theory
ECE1647H	Introduction to Nonlinear Control Systems

JCB1349H	Molecular Assemblies: Structure/Function/Properties
JEB1365H	Ultrasound: Theory and Applications in Biology and Medicine
JEB1433H	Medical Imaging
JEB1444H	Neural Engineering
JEB1447H	Sensory Communications
JMB1050H	Biological and Bio-inspired Materials
JNP1017H[+]	Current Topics in Molecular and Biochemical Toxicology
JNP1018H[+]	Molecular and Biochemical Basis of Toxicology
JNR1444Y	Fundamentals of Neuroscience: Cellular and Molecular — Lectures
JNS1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPB1022H	Human Physiology as Related to Engineering II
JPB1055H	Bioengineering for Life Scientists
JTC1135H	Applied Surface Chemistry
JTC1331H	Biomaterials Science
MIE1001H	Advanced Dynamics
MIE1101H	Advanced Classical Thermodynamics
MIE1201H	Advanced Fluid Mechanics I
MIE1452H	Signal Processing for Bioengineering
MSE1026H	Analytical Electron Microscopy
PHM1109H	Recent Developments in Dosage Form Design
PSL1432H	Theoretical Physiology
PSL1452H	Fundamentals of Ion Channel Function
REH1100H	Theory and Research in Rehabilitation Science

[+] *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);

Master of Museum Studies;
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.

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

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.

Book History and Print Culture: 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 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

- Students must fulfil the degree requirements of the unit in which they are enrolled.

- 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

BKS1001H	Introduction to Book History
BKS1002H	Book History in Practice
BKS2000H	Advanced Seminar in Book History and Print Culture
BKS2001H	Individual Practicum in Book History and Print Culture

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.

JCV1060H	Developmental Cardiovascular Physiology
JCV3060H	Advanced Topics in Cardiovascular Sciences — Molecular Biology and Heart Signal Transduction
JCV3061H	Advanced Topics in Cardiovascular Sciences — Hormones and the Cardiovascular System
JCV3062H	Advanced Topics in Cardiovascular Sciences — Heart Function
JCV3063H	Advanced Topics in Cardiovascular Sciences — Vascular
JCV3064H	Advanced Topics in Cardiovascular Sciences — Microvascular Medicine
JCV3065H	Advanced Topics in Cardiovascular Sciences — Systems Biology
JTC1331H	Biomaterials Science
KIN5508H	Cardiovascular Disease and Exercise
LMP1104H (0.25 FCE)	Current Understanding of Ischemic Heart Disease
LMP1105H (0.25 FCE)	Current Understanding of Atherosclerosis
PSL1462H	Molecular Aspects of Cardiac Function

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

UCS1000H	Community Development

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

LHA1102H	Community Development: Innovative Models
LHA1104H	Social Action Education: Community Development, Social Services, and Social Movements
LHA1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA1190H	Community Healing and Peacebuilding
LHA1194H	Cyberliteracy and Adult Education
LHA1196H	Walking Together, Talking Together: The Praxis of Reconciliation
LHA5100H	Special Topics in Adult Education and Community Development: Master's Level (with approval of the Director)
LHA6100H	Special Topics in Adult Education and Community Development: Doctoral Level (with approval of the Director)

Counselling Psychology

APD1290H	Indigenous Healing in Counselling and Psychoeducation

Nursing

NUR1047Y	Community Participation and Health
NUR1083H	Comparative Politics of Health Policy in a Globalizing World

Planning

JPG1507H	Housing Markets and Housing Policy Analysis
JPG1512H	Place, Politics, and the Urban
JPG1518H	Sustainability and Urban Communities
JPG1615H	Planning the Social Economy
JPG1812Y	Planning for Change: Community Development in Practice

Public Health Sciences

CHL5126H	Building Community Resilience
CHL7001H	Directed Reading

Social Work

SWK4210H	Promoting Empowerment: Working at the Margins
SWK4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK4422H	Social Housing and Homelessness
SWK4512H	Research Knowledge for Social Justice

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 (CIDEC)
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:
  - 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.
  - 0.5 core FCE CIDE graduate course.
  - 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 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. 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

CIE1001H	Introduction to Comparative, International, and Development Education
CIE1002H	Practicum for 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

Curriculum, Teaching and Learning

Curriculum and Pedagogy Program

CTL1037H	Teacher Development: Comparative and Cross-Cultural Perspectives
CTL1060H	Education and Social Development
CTL1312H	Democratic Citizenship Education
CTL1319H	Religious Education: Comparative and International Perspectives
CTL1330H	Education and Peacebuilding in Conflict Zones: International Comparative Perspectives

Leadership, Higher and Adult Education

Adult Education and Community Development Program

LHA1146H	Women, War, and Learning
LHA3064H	Global Governance and Educational Change: the Politics of International Cooperation in Education
LHA3104H	Adult Education, Marxism, and Feminism

Educational Leadership and Policy Program

LHA1065H	Educational Equity and Excellence in International Comparison
LHA1066H	Comparative and International Perspectives on Gender and Education Policy and Practice

Higher Education Program

LHA1806H	Systems of Higher Education
LHA1807H	System-Wide Planning and Policy for Higher Education
LHA1825H	Comparative Education Theory and Methodology (RM)
LHA1826H	Comparative Higher Education
LHA1846H	Internationalization of Higher Education in a Comparative Perspective
LHA3810H	International Academic Relations

Social Justice Education

SJE1924H	Modernization, Development, and Education in African Contexts
SJE1927H	Migration and Globalization
SJE1976H	Critical Media Literacy Education
SJE3911H	Cultural Knowledges, Representation, and Colonial Education

Elective Courses

Curriculum, Teaching and Learning

Curriculum and Pedagogy Program

CTL1031H	Language, Culture, and Identity: Using the Literary Text in Teacher Development
CTL1063H	Pedagogies of Solidarity
CTL1218H	Culture and Cognition in Mathematics, Science, and Technology Education
CTL1221H	Education for Human Goals Local and Global: How's Science Education Helping?
CTL1307H	Identity Construction and Education of Minorities
CTL1318H	Teaching Conflict and Conflict Resolution
CTL1320H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL1321H	Aboriginal Civilization: Language, Culture, and Identity
CTL1332H	Introduction to Decolonization in Education
CTL1406H	The Origins of Modern Schooling: Issues in the Development of the North American Educational System
CTL1430H	Gendered Colonialisms, Imperialisms, and Nationalisms in History

Language and Literacies Education Program

CTL3000H	Foundations of Bilingual and Multicultural Education
CTL3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL3011H	Cognitive Sociolinguistic and Sociopolitical Orientations in Bilingual Education Research
CTL3015H	Language and Literacies Education in Multilingual Contexts
CTL3018H	Language Planning and Policy
CTL3024H	Language Teacher Education
CTL3025H	Educational Sociolinguistics
CTL3026H	Pragmatics in Language Education
CTL3031H	Children's Literature Within a Multicultural Context
CTL3100H	Communication and Second Language Learning in the Workplace
CTL3805H	Multilingualism and Pluralism

Leadership, Higher and Adult Education

Adult Education and Community Development Program

LHA1102H	Community Development: Innovative Models
LHA1113H	Gender and Race at Work
LHA1115H	Learning for the Global Economy

LHA1142H	Young Adulthood in Crisis: Learning, Transitions, and Activism
LHA1145H	Participatory Research in the Community and the Workplace (RM)
LHA1147H	Women, Migration, and Work
LHA1180H	Indigenous Worldviews: Implications for Education
LHA1181H	Embodied Learning and Alternative Approaches to Community Wellness
LHA1184H	Aboriginal Knowledge: Implications for Education
LHA1190H	Community Healing and Peacebuilding
LHA1196H	Walking Together, Talking Together: The Praxis of Reconciliation
LHA3140H	Decolonization and Transformative Education

Educational Leadership and Policy Program

LHA1029H	Special Applications of the Administrative Process
LHA1041H	Educational Administration II: Social and Policy Context of Schooling
LHA3041H	Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education
LHA3055H	Democratic Values, Student Engagement, and Democratic Leadership

Higher Education Program

LHA1803H	Recurring Issues in Postsecondary Education

Social Justice Education

SJE1912H	Foucault and Research in Education and Culture: Discourse, Power, and the Subject
SJE1921Y	The Principles of Anti-Racism Education
SJE1922H	Sociology of Race and Ethnicity
SJE1925H	Indigenous Knowledge and Decolonization: Pedagogical Implications
SJE1926H	Race, Space, and Citizenship: Research Methods
SJE1951H	The School and the Community
SJE1956H	Social Relations of Cultural Production in Education
SJE2941H	Bourdieu: Theory of Practice in Social Sciences
SJE3905H	Interdisciplinary Approaches to Research: Theory and Praxis
SJE3912H	Race and Knowledge Production: Research Methods
SJE3914H	Anti-Colonial Thought and Pedagogical Challenges
SJE3915H	Franz Fanon and Education
SJE3933H	Globalisation and Transnationality: Feminist Perspectives

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 — MScPl
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 research paper, as long as the topic is related to Asia and is approved by the collaborative specialization director. In rare cases when a student undertakes a master'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

ASI1001H	Independent Research in Contemporary East and Southeast Asian Studies
ASI1000Y	Issues in Contemporary East and Southeast Asian Studies
ASI4140H	The Public Event in Asia
ASI4200H	Asia and the New Global Economy
ASI4300H	Nationalism and Revolution in Asia
ASI4900H	Special Topics in Contemporary Asian Studies

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-cs-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.
  - The major research paper, thesis, or practicum placement 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

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.

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:

- 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

IDS1000H	Development Policy and Power
SRM3333H	Master's Seminar Series

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

ANT6019H	Anthropology of Neoliberalism
ANT7002H	Medical Anthropology II

Comparative, International and Development Education

CIE1001H	Introduction to Comparative, International, and Development Education
CIE1006H	Transnational Perspectives on Democracy, Human Rights, and Democratic Education in an Era of Globalization

Curriculum, Teaching and Learning

CTL1060H	Education and Social Development

Geography and Planning

GGR1807H	Special Topics: Geographies of Postcoloniality and Development: Exploring the 'Infrastructure Turn'
JPG1426H	Natural Resources, Difference, and Conflict
JPG1429H	Political Ecology of Food and Agriculture
JPG1502H	Global Urbanism and Cities of the Global South
JPG1520H	Contested Geographies of Class-Race Formation
JPG1706H	Violence and Security

Leadership, Higher and Adult Education

LHA1104H	Social Action Education — Community Development, Social Services, and Social Movements

Physical and Environmental Sciences

EES1122H	Global Environmental Security and Sustainable Development
EES1134H	Climate Change Policy
EES1135H	Environmental Change and Human Health
EES3002H	Conservation Policy

Political Science

POL2205H	Topics in International Politics I
POL2212H	Human Rights, Politics, and International Relations
POL2226H	Ethics and International Relations
POL2322H	Topics in Comparative Politics II
POL2345H	Politics of Growth in Developing Countries
POL2351H	Contentious Politics and Social Movements
POL2361H	Globalization and Indigenous Politics
POL2391H	Topics in International Politics III
POL2392H	Topics in International Politics IV
POL2405H	Topics in Latin American Politics
POL2408H	Political Economy of International Development
POL2418H	Topics in Middle East Politics

Public Health Sciences

CHL5113H	Global Migration and Health
CHL5702H	History of International Health
CHL8001H	Selected Topics in Public Health Issues

Social Justice Education

SJE1909H	Environmental Sustainability and Social Justice 1
SJE1954H	Marginality and the Politics of Resistance

Sociology

SOC6008H	Network Analysis I
SOC6009H	Ethnicity I
SOC6101H	Sociological Theory II
SOC6119H	Gender Relations II
SOC6210H	Political Sociology III

Women and Gender Studies

WSG1010H	Special Topics in Feminist Studies 2
WSG1013H	Special Topics in Feminist Theory 1
WSG1014H	Special Topics in Feminist Theory 2
WSG1016H	Migration, Mobility, and Displacement in Contemporary Africa
WSG1017H	Special Topics in Feminist Studies
WSG1019H	Special Topics in Feminist Studies
WSG1020H	Gender and Globalization: Transnational Perspectives

Developmental Biology

Developmental Biology: Introduction

Lead Faculty of the Collaborative Specialization

Medicine

Participating Degree Programs

Biochemistry — MSc, PhD
Biomedical Engineering — MASc, PhD
Cell and Systems Biology — MSc, PhD
Clinical Engineering — MHSc
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

Dr. Bret Pearson, Director
Collaborative Specialization in Developmental Biology
Department of Molecular Genetics, University of Toronto
Peter Gilgan Centre for Research and Learning
686 Bay Street, Room 18-9-712
Toronto, Ontario M5G 0A4 Canada

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

Students must:

- 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

Students must:

- 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:

JDB1024Y	Topics in Developmental Biology
JDB1025H	Developmental Biology
JDB1026Y	Student Seminars in Developmental Biology

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 multistriated 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

DTS1000H	Comparative Research Methods in Diaspora and Transnationalism
DTS2000H	Graduate Topics in Diaspora Studies
DTS2001H	Graduate Topics in Diaspora Studies
DTS2002H	Graduate Topics in Diaspora Studies
JCD5135H	Race, Politics, and Jewishness
JCD5136H	Migration and Memory: Narratives of Jewish Exile and Displacement

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

Collaborative Specialization in Editing Ancient and Medieval Texts
Centre for Medieval Studies
University of Toronto
3rd Floor, 125 Queen's Park
Toronto, Ontario M5S 2C7
Canada

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

MST1000Y	Medieval Latin I
MST1101H	Codicology (PR)
MST1104H	Latin Palaeography I (PR)
MST1105H	Latin Palaeography II (PR)
MST1107H	Latin Textual Criticism (PR)
MST1110H	Diplomatics and Diplomatic Editing (PR)
MST1111H[+]	Higher Seminar in Editing Ancient and Medieval Texts (Credit/No Credit)
MST1115H	English Palaeography (PR)
MST1384H	The Exeter Book of Old English Verse (PR)
MST1392H	Editing and Appreciating Wulfstan's Prose (PR)

[+] *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

CREFO Conference Series (SRM4444H *Doctoral Seminar Series*).
- 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, Francophonies and Diversity: Courses

Not all courses are offered every year. Please consult the respective graduate unit's course schedule for details.

Core Course

CRE1001H	Séminaire d'études : Éducation, francophonies et diversité

Elective Courses

CTL1000H	Les fondements du curriculum et de la pédagogie
CTL1011H	L'éducation pour l'anti-oppression en milieu scolaire
CTL1304H	Études culturelles et éducation
CTL1306H	La recherche qualitative en éducation : bases théoriques et pratiques
CTL1307H	Identité collective et éducation minoritaire de langue française
CTL3200H	Analyse du discours
CTL3201H	Bilinguisme et éducation
CTL3202H	Politique et aménagement linguistique
SJE1900H	Introduction à la sociologie de l'éducation
SJE1951H	L'école, la participation parentale et la communauté
JTE1952H	Langue, culture, et éducation

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.

Master's-Level Core Course

EDP3045H	Educational Policy and Program Evaluation

Master's-Level Electives

APD1211H	Psychological Foundations of Early Development and Education
APD1241H	Outcomes of Early Education and Child Care
CTL1428H	Immigration and the Development of Canadian Education
CTL1429H	Ethnicity and the Development of Canadian Education
CTL7074H	Issues in Educational Law, Policy, and Ethics
LHA1016H	School Program Development and Implementation
LHA1018H	Political Skill in the Education Arena
LHA1020H	Teachers and Educational Change
LHA1035H	Sociology of Education
LHA1065H	Educational Equity and Excellence in International Comparison
LHA1171H	Foundations of Indigenous Education in Canada
LHA1806H	Systems of Higher Education
LHA5000H*	Special Topics in Educational Leadership and Policy: Master's Level*
LHA5004H	Special Topics in Educational Leadership and Policy: Master's Level
LHA5006H	Special Topics in Educational Leadership and Policy: Master's Level
LHA5800H*	Special Topics in Higher Education: Master's Level*
LHA5801H*	Special Topics in Higher Education: Master's Level*
LHA5807H	Special Topics in Higher Education: Master's Level
SJE1902H	Introductory Sociological Research Methods in Education
SJE1903H	Major Concepts and Issues in Social Justice Education
SJE1912H	Foucault and Research in Education and Culture: Disclosure, Power, and the Subject
SJE1922H	Sociology of Race and Ethnicity
SJE1951H	The School and the Community
SJE1954H	Marginality and the Politics of Resistance

SJE5000H*	Special Topics in Social Justice Research in Education: Master's Level*
SJE5005H	Special Topics in Social Justice Research in Education: Master's Level

Doctoral-Level Core Courses

EDP3045H	Educational Policy and Program Evaluation
EDP3145H	Advanced Issues in Educational Policy Analysis and Program Evaluation

Doctoral-Level Electives

CTL3000H	Foundations of Bilingual and Multicultural Education
CTL3008H	Critical Pedagogy, Language, and Cultural Diversity
CTL3018H	Language Planning and Policy (Exclusion: CTL3202H)
JOI3048H	Intermediate Statistics in Educational Research: Multiple Regression Analysis (RM)
JSA5147H	Language, Nationalism, and Post-nationalism
LHA3041H	Administrative Theory and Educational Problems II: Doctoral Seminar on Policy Issues in Education
LHA3043H	Survey Research in Educational Leadership and Policy (RM)
LHA3064H	Global Governance and Educational Change: the Politics of International Cooperation in Education
LHA6000H*	Special Topics in Educational Leadership and Policy: Doctoral Level*
LHA6002H	Special Topics in Educational Leadership and Policy: Doctoral Level
LHA6005H	Special Topics in Educational Leadership and Policy: Doctoral Level
SJE2941H	Bourdieu: Theory of Practice in Social Sciences
SJE6000H*	Special Topics in Social Justice Research in Education: Doctoral Level*

*** 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 TEP1206Y[0] *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.

[0] Course that may continue over a program. The course is graded when completed.

Engineering Education: Courses

Core Courses

TEP1204H	Instructional Design in Engineering Education
TEP1205Y	Engineering Education Research Seminar — Master's Level (Credit/No Credit)
TEP1206Y[0]	Engineering Education Research Seminar — Doctoral Level (Credit/No Credit)

[0] Course that may continue over a program. The course is graded when completed.

Elective Courses (PhD Level Only)

Department of Curriculum, Teaching and Learning

CTL1018H	Introduction to Qualitative Inquiry in Curriculum, Teaching, and Learning
CTL1041H	Research Methods in Education
CTL1042H	Instrument Development in Education
CTL1047H	Course Self-Assessment
CTL1206H	Teaching and Learning Science
CTL1207H	Teaching and Learning about Science: Issues and Strategies in Science, Technology, Society and Environment (STSE) Education
CTL1211H	Action Research in Science, Mathematics, and Technology Education
CTL1215H	Teaching and Learning about Science and Technology: Beyond Schools
CTL1218H	Culture and Cognition in Mathematics, Science, and Technology Education
CTL1306H	Qualitative Research Methods in Education: Concepts and Methods
CTL1603H	Introduction to Knowledge Building
CTL1608H	Constructive Learning and Design of Online Environments

Faculty of Applied Science and Engineering

APS520H	Technology, Engineering, and Global Development
APS530H	Appropriate Technology and Design for Global Development
APS1001H	Project Management
APS1012H	Managing Business Innovation and Transformational Change
APS1013H	Applying Innovation in Engineering and Business Operations
APS1018H	The Engineer in Society — Ethics, History, and Philosophy
MIE1402H	Experimental Methods in Human Factors Research
MIE1403H	Analytical Methods in Human Factors Research
MIE1413H	Statistical Models in Empirical Research
MIE1415H	Analysis and Design of Cognitive Work
TEP1010H	Cognitive and Psychological Foundations of Effective Leadership
TEP1011H	Authentic Leadership: Engineering a Vibrant Future
TEP1501H	Leadership and Leading in Groups and Organizations
TEP1502H	Leadership in Product Design

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 fulfilment 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.

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.
- 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.

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 the 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.

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 fulfil the specialization requirements. For a current graduate course listing, please refer to the School of the Environment's website.

Core Course

ENV1001H	Environmental Decision Making

Elective Courses

ENV1002H	Environmental Policy
ENV1007H	The Warming Papers: The Scientific Foundation of Climate Change
ENV1008H	Worldviews and Ecology
ENV1103H	Living Labs for Applied Sustainability
ENV1444H	Capitalist Nature
ENV1701H	Environmental Law
ENV1703H	Water Resource Management and Policy
ENV1704H	Environmental Risk Analysis and Management
ENV1707H	Environmental Finance and Sustainable Investing
ENV2000H,Y	Topics in Environment
ENV2002H	Special Topics in Environment
ENV4444Y	Internship
ENV5555Y	Research Paper

Elective Joint Courses with the School of the Environment

JGE1413H	Workshop in Environmental Impact Assessment
JGE1420H	Urban Waste Management: an International Perspective
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JSE1708H	Sustainability and the Western Mind

Other Elective Courses

Adult Education and Community Development (Department of Leadership, Higher and Adult Education)

LHA1104H	Social Action Education — Community Development, Social Services, and Social Movements
LHA1160H	Introduction to Transformative Learning Studies
LHA1193H	Adult Education for Sustainability
LHA5100H	Special Topics in Adult Education and Community Development: Master's Level
LHA6100H	Special Topics in Adult Education and Community Development: Doctoral Level

Anthropology

ANT6018H	Approaches to Nature and Culture

Chemical Engineering and Applied Chemistry

CHE1435H	Fundamentals of Aerosol Physics and Chemistry
JNC2503H	Environmental Pathways

Chemistry

CHM1401H	Transport and Fate of Chemical Species in the Environment
CHM1404H	Molecular Analysis of Natural Systems
CHM1410H	Analytical Environmental Chemistry
CHM1415H	Atmospheric Chemistry
CHM1420H	Environmental Chemistry of Soil
CHM1425H	Modelling the Fate of Organic Chemicals in the Environment

Computer Science

CSC2720H	Systems Thinking for Global Problems

English

ENG5580H	American Pastoral
ENG6181H	Permaculture and Literature

Forestry

FOR1270H	Forest Biomaterial Sciences: Fundamentals, Applications, and the Next Frontier
FOR1288H	Design and Manufacturing of Biomaterials
FOR1294H	Bioenergy and Biorefinery Technology
FOR1416H	Forest Fire Danger Rating
FOR1555H	Wildlife Ecology and Conservation
FOR1575H	Urban Forest Conservation
JFG1610H	Sustainable Forest Management and Certification

Geography and Planning

GGR1216H	Advanced Biogeochemical Processes
GGR1404H	Global Warming
GGR1406H	Energy Supply and Use
GGR1407H	Efficient Use of Energy
GGR1408H	Carbon-Free Energy
GGR1411H	Nature and Justice in the Anthropocene
JGE1413H	Workshop in Environmental Impact Assessment
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JPG1518H	Sustainability and Urban Communities
JPG1814H	Cities and Immigrants
JPG1818H	The Geography and Planning of Climate Action and Activism
PLA1601H	Climate Change and Resilience: Planning and Policy

Global Affairs

JSE1708H	Sustainability and the Western Mind

History and Philosophy of Science and Technology

HPS4106H	Environment and STS

Management

RSM2615H	Special Topics in Organizational Behaviour and Human Resource Management

Mechanical and Industrial Engineering

MIE1120H	Current Energy Infrastructure and Resources

Physics

PHY1498H	Introduction to Atmospheric Physics
PHY2502H	Climate System Dynamics
PHY2504H	Advanced Atmospheric Dynamics
PHY2505H	Atmospheric Radiative Transfer and Remote Sounding
PHY2506H	Data Assimilation and Retrieval Theory

Political Science

POL2213H	Global Environmental Politics

Social Justice Education

SJE1909H	Environmental Sustainability and Social Justice 1
SJE1919H	Advanced Topics in Environmental Justice Education
SJE2999H	Special Topics in Sociological Research in Education (this course will be allowed as an elective provided it has environmental studies content)

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 the 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.

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 fulfil the specialization requirements. For a current graduate course listing, please refer to the School of the Environment website.

Core Course

ENV4001H	Graduate Seminars in Environment and Health

Elective Courses

ENV1703H	Water Resources Management and Policy
ENV1704H	Environmental Risk Analysis and Management
ENV3000H,Y	Topics in Environment and Health

Elective Joint Courses with the School of the Environment

JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JNC2503H	Environmental Pathways
JNP1014Y	Interdisciplinary Toxicology
JNP1016H	Graduate Seminar in Toxicology

Other Elective Courses

Adult Education and Community Development (Department of Leadership, Higher and Adult Education)

LHA1197H	The Pedagogy of Food

Chemical Engineering and Applied Chemistry

CHE1435H	Fundamentals of Aerosol Physics and Chemistry
JNC2503H	Environmental Pathways

Chemistry

CHM1401H	Transport and Fate of Chemical Species in the Environment
CHM1410H	Analytical Environmental Chemistry
CHM1415H	Atmospheric Chemistry
CHM1420H	Environmental Chemistry of Soil
CHM1425H	Modelling the Fate of Organic Chemicals in the Environment

Civil and Mineral Engineering

CIV1399H	Special Studies in Civil Engineering (this course will be allowed as an elective provided it has environment and health content)

Earth Sciences

ESS1463H	Contaminants in the Environment

Forestry

FOR1575H	Urban Forest Conservation

Geography and Planning

GGR1422H	The Geography of Urban Air Pollution
JGE1425H	Livelihoods, Poverty, and Environment in the Developing Countries
JPG1421H	Health in Urban Environments
JPG1428H	Greening the City: Urban Environmental Planning and Management

Pharmacology and Toxicology

JNP1014Y	Interdisciplinary Toxicology
JNP1016H	Graduate Seminar in Toxicology

Public Health Sciences

CHL5126H	Building Community Resilience
CHL5413H	Public Health Sanitation
CHL5416H	Environmental Epidemiology
CHL5809H	Ecological Public Health
CHL5903H	Environmental Health
CHL5910H	Occupational and Environmental Hygiene I
CHL5911H	Occupational and Environmental Hygiene II
CHL5921H	Protecting the Public from Air Pollution
CHL7001H	Directed Reading
CHL8001H	Selected Topics in Public Health Issues (this course will be allowed as an elective provided it has environmental studies content)

Social Justice Education

SJE1909H	Environmental Sustainability and Social Justice 1
SJE1919H	Advanced Topics in Environmental Justice Education
SJE2999H	Special Topics in Sociological Research in Education

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 Literacies 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

EIP3000H	Coordinating Seminar: Ethnic, Immigration and Pluralism Studies (formerly known as JTH3000H Coordinating Seminar: Ethnic Relations Theory, Research, and Policy)

Anthropology

ANT5150H	Nation, State, and Language in Francophone Canada
ANT6033H	Advanced Research Seminar III

Curriculum, Teaching and Learning

CTL1320H	Introduction to Aboriginal Land-Centered Education: Historical and Contemporary Perspectives
CTL1321H	Aboriginal Civilization: Language, Culture, and Identity
CTL1424H	Religion, Ideology, and Social Movement in the Development of North American Education
CTL1428H	Immigration and the Development of Canadian Education
CTL1429H	Ethnicity and the Development of Canadian Education
CTL3026H	Pragmatics in Language Education
CTL3799H	Special Topics in Language and Literacies Education Program: Master's Level
JTE1952H	Language, Culture, and Education

Economics

ECO3800H	Labour Economics I

Geography

JPG1506H	State/Space/Difference: Understanding the New Social Geography of the State
JPG1805H	Transnationalism, Diaspora, and Gender

History

HIS1117H	Canada: Colonialism/Postcolonialism

HIS1287H	Polish Jews Since the Partitions of Poland (joint graduate/undergraduate)
HIS1440H	Irish Nationalism in Canada, 1858–1870 (joint graduate/undergraduate)

Industrial Relations and Human Resources

IRE1725H	Cross Cultural Differences in Organizational Contexts

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.

LAW5022H	Introduction to Islamic Law
LAW7024H	Citizenship: Inside and Out
LAW7052Y	Aboriginal Peoples and Canadian Law
LAW7053H	Intensive Course: Who Belongs? Dilemmas of Citizenship and Immigration
LAW7060Y	Discrimination Law
LAW7066H	Canadian Migration Law
LAW7076H	Refugee Law
LAW7078H	Law of Forced Migration

Leadership, Higher and Adult Education

LHA1029H	Special Applications of the Administrative Process
LHA1042H	Educational Leadership and Diversity
LHA3042H	Field Research in Educational Leadership and Policy (RM)

Political Science

POL2026H,Y	Topics in Political Thought I
POL2102H	Topics in Canadian Politics I
POL2103H	Topics in Canadian Politics II
POL2167H	The Politics of Immigration and Multiculturalism in Canada
POL2207H	Topics in International Politics III
JRA2391H	Topics in Comparative Politics
POL2392H,Y	Topics in Comparative Politics IV

Public Policy

PPG1005H	The Social Context of Policy-Making (this course often includes content related to ethnicity and immigration; verify a particular instructor's course with the Ethnic, Immigration and Pluralism Studies specialization)
PPG2001H	Legal Analysis of Public Policy

Religion

RLG2027H	Law and Religion: Critical Conversations
RLG3931H	Topics in North American Religions

Social Justice Education

JSA5147H	Language, Nationalism, and Post-Nationalism
JTE1952H	Language, Culture, and Education
SJE1921Y	The Principles of Anti-Racism Education
SJE1922H	Sociology of Race and Ethnicity
SJE1926H	Race, Space, and Citizenship: Research Methods
SJE1927H	Migration and Globalization
SJE3933H	Globalisation and Transnationality: Feminist Perspectives

Social Work

SWK4210H	Promoting Empowerment: Working at the Margins
SWK4304H	Globalization and Transnationalism: Intersections of Policy and Community Practice Locally and Globally
SWK4306H	Theoretical Approaches to Defining Social Injustice and Engaging in Social Change
SWK4658H	Social Work with Immigrants and Refugees

Sociology

SOC6002H	Immigration I
SOC6003H	Immigration II
SOC6009H	Ethnicity I
SOC6109H	Ethnicity II

Women and Gender Studies

WGS1026H	Special Topics in Race and Feminism

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.

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 seminar FST1000H *Comparative Research Methods in Food Studies* (0.5 full-course equivalent [FCE]).
- 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 2.0 FCEs from a combination of:
  - an internship MSL3000Y (1.0 FCE) related to food studies;
  - a project MSL4000Y (1.0 FCE) related to food studies;
  - 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: 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

- Students must meet 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]), if not already taken at the master's level. Students who have completed the Food Studies collaborative specialization at the master's level are exempted from this requirement.
- 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.
- Regular and active participation in SRD4444H *Culinaria Seminar Series*.
- The student's dissertation in their home graduate unit must be on a topic in food studies, approved by the specialization committee.
- 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

FST2000H	Food, Culture, and Society

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.

ANT4039H	Origin and Nature of Food Producing Societies
CHL5652H	Foundations of Practice III
HIS1301H	History of Food and Drink
JPG1429H	Political Ecology of Food and Agriculture
LHA1197H	The Pedagogy of Food
MST1370H	From Farm to Market: Social and Economic Transformation in Medieval Europe
NFS1201H	Public Health Nutrition
NFS1212H	Regulation of Food Composition, Health Claims, and Safety
NFS1216H	Selected Topics in Nutrition
NFS1218H	Recent Advances in Nutritional Sciences I

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 omes 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

Collaborative Specialization in Genome Biology and Bioinformatics
Department of Cell and Systems Biology
Faculty of Arts and Science, University of Toronto
25 Harbord Street, RW 424G
Toronto, Ontario, M5S 3G5
Canada

Genome Biology and Bioinformatics: 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. Since this is a doctoral-level course of study, students must be registered in the doctoral program of one of the host graduate units and must be undertaking research with a significant genome biology and/or bioinformatics component under the supervision of a member of the collaborative specialization.

Program Requirements

- Complete a PhD thesis in the area of the collaborative specialization, and any core courses as required by the student's host graduate unit.
- Complete the seminar series in Genome Biology and Bioinformatics (GBB1001H; 0.5 FCE). Students will be required to present and discuss their research projects in this seminar series.
- Participate in collaborative traineeships in which an aggregate time of two to four months is spent in a collaborating laboratory, thematically working on an aspect of the thesis project but with a complementary method. The goal of the collaborative traineeship is ideally a joint publication between the two member labs.

Genome Biology and Bioinformatics: Courses

Students are required to enrol in the seminar course GBB1001H.

Required Seminar Series

GBB1001H Seminar in Genome Biology and Bioinformatics

Elective

CSB1482H Readings in Genome Biology and Bioinformatics

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 — MScPl, 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

CHL5701H	Doctoral Seminar, Collaborative Specialization in Global Health

Plus one of the following:

CHL5702H	History of International Health
CHL5704H	International Human Rights Law and Global Health: The Right to Health in Theory and Practice
HAD5768H	International Perspectives on Health Services Management
JCR1000Y	An Interdisciplinary Approach to Addressing Global Challenges
NUR1038H	Social Determinants of Health in a Global Context
NUR1083H	Comparative Politics of Health and Health Policy in a Globalizing World

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.

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
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; and 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

JNH5001H	Health Care Settings, Sites, and Human Well-Being
JNH5002H	The Body, Health Care, Technology, and Place
NUR1031H	Technology and Place in Contemporary Health Care Work

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
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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.

- **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.

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 complete a **dissertation** under the supervision of a core faculty member of the collaborative specialization. The dissertation must address the theme of health services and policy research.

Health Services and Policy Research: Courses

Required

HSR1000H	Research and/or Policy Practicum
HSR1002H	Health Services Research Seminar (Credit/No Credit)

Electives

HAD5011H	Canada's Health Care System and Health Policy
HAD5727H	Knowledge Transfer and Exchange
HAD5728H	Performance Measurement in Health Care: Theory and Application
HAD5780H	Program Planning and Evaluation for Health Services and Policy Research
HAD7001H	Reading Course
HSR1001H	Introduction to Qualitative Methods for Health Services and Policy Research

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/wbiih/collaborative-specialization-in-indigenous-health
Email: wbiih.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.

Contact and Address

Web: www.cjs.utoronto.ca
Email: cjs.director@utoronto.ca

Telephone: (416) 978-1624
Fax: (416) 946-7719

Collaborative Specialization in Jewish Studies
Anne Tanenbaum Centre for Jewish Studies
University of Toronto
170 St. George Street, Suite 218
Toronto, Ontario M5R 3M8
Canada

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

CJS1000H	Jewish Studies Master's Seminar
CJS2000H	Jewish Studies Doctoral Seminar

Elective Courses

History

HIS1279H	World War II in East Central Europe
HIS1287H	Polish Jews Since the Partitions of Poland

Medieval Studies

MST3225H#	Jews and Christians in Medieval and Renaissance Europe

Music

CJS1010H	Representations of Jews and Jewishness in Opera

Near and Middle Eastern Civilizations

NMC1100Y#	Introduction to Aramaic
NMC1101Y#	Early Syriac Texts
NMC1102Y	Palestinian Aramaic Texts
NMC1105Y#	Syriac Historical Texts
NMC1106Y#	Syriac Exegetical Texts
NMC1111Y#	Babylonian Aramaic
NMC1306H	Scribes, Manuscripts, and Translations of the Hebrew Bible
NMC1308H#	Readings in Hebrew Bible
NMC1316H	Modern Hebrew Poetry
NMC1317H	Modern Hebrew Prose
NMC1318H	Midreshei Halakha: Purity and Cultic Texts
NMC1608Y	Life Cycle and Personal Status in Judaism: Reproductive Technology and Jewish Law

Philosophy

Various courses, depending upon their content in a given year. Consult the collaborative specialization director.

PHL2084H#	Seminar in Nineteenth-Century Continental Philosophy
PHL2089H#	Seminar in Twentieth-Century Continental Philosophy
PHL2090H	Hermeneutics

Political Science

POL2021Y#	Comparative Studies in Jewish and Non-Jewish Political Thought

Religion

RLG3611H	Hebrew Literature and Religion: Midrash Aggadah
RLG3621H	Modern Jewish Thought
RLG3622H	Maimonides and His Modern Interpreters
RLG3634H#	Worship and Scripture at Qumran
RLG3641H	Interpretations of Jewish Tradition
RLG3645Y	The Jewish Legal Tradition
RLG3647H	Early Rabbinic Judaism

Slavic Languages and Literatures

SLA1207H	The Imaginary Jew

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);

    - 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).
- The thesis or major research project in the participating degree program should be relevant to the area of knowledge media design, as approved by the home graduate unit and the collaborative specialization committee.
- Students must submit a portfolio that includes completed student 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' thesis or major research project will be a component of their portfolios.
- Collaborative specialization courses may be taken as electives for the purpose of satisfying home program requirements.

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.
- 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 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. 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 **1.0 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 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' thesis will be a component of their portfolios.
- The thesis in the participating degree program should be relevant to the area of knowledge media design, as approved by the home graduate unit and the collaborative specialization committee.
- 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

- 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 student 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

KMD1001H	Theory and Methods in Knowledge Media Design (Required for master's and PhD students.)
KMD1002H	Applications in Knowledge Media (Credit/No Credit. Required for PhD students only; elective for master's students. Offered once every two years.)
KMD2100Y	Master's Seminar (Credit/No Credit)
KMD2200Y	Doctoral Seminar (Credit/No Credit)

Electives

KMD2002H	Technologies for Knowledge Media
KMD3000H	Readings in Knowledge Media Design
KMD3001H	Readings in Knowledge Media Design
KMD4000H	Knowledge Media Design: Special Topics (Prerequisite: KMD1001H.)

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

LAN1021H	Visual Communication 1
LAN1022H	Visual Communication 2
LAN1031H	History, Theory, Criticism 1
LAN1032H	History, Theory, Criticism 2
URD1031H	The History of Toronto Urban Form
URD1041H	Introduction to Urban Design Theory
VIS1010H	Contemporary Art Since 1960
VIS1020H	Contemporary Art: Theory and Criticism
VIS1101H	Paradigmatic Exhibitions: History, Theory, Criticism

Computer Science

CSC2514H	Human-Computer Interaction
CSC2526H	HCI: Topics in Ubiquitous Computing
CSC2537H	Information Visualization
CSC2552H	Topics in Computational Social Science
CSC2556H	Algorithms for Collective Decision Making
CSC2720H	Systems Thinking for Global Problems

Curriculum and Pedagogy; Language and Literacies Education

CTL1602H	Introduction to Computers in Education
CTL1608H	Constructive Learning and Design of Online Environments
CTL1609H	Educational Applications of Computer-Mediated Communication
CTL1617H	Social Media and Education
CTL1926H	Knowledge Media and Learning

Drama, Theatre and Performance Studies

DRA3904H	Topics in Theatre, Drama, and Performance
DRA3908H	Topics in Theatre, Drama, and Performance

Information

INF1602H	Fundamentals of User Experience
INF2122H	Digital Preservation and Curation
INF2169H	User-Centred Information Systems Development
INF2170H	Information Architecture
INF2191H	User Interface Design
INF2192H	Representing UX
INF2197H	Special Topics in Information (Topics may vary each year and may not be applicable.)
INF2241H	Critical Making: Information Studies, Social Values, and Physical Computing
INF2242H	Studying Information and Knowledge Practice
INF2243H	Critical Histories of Information and Communication Technologies
INF2300H	Special Topics in Information (Topics may vary each year and may not be applicable.)
INF2303H	Special Topics in Information (Topics may vary each year and may not be applicable.)
INF2306H	Special Topics in Information (Topics may vary each year and may not be applicable.)
INF2320H	Remix Culture
INF2330H	Information Ethnography
INF2331H	The Future of the Book

Mechanical and Industrial Engineering

MIE1401H	Human Factors Engineering
MIE1402H	Experimental Methods in Human Factors Research

Museum Studies

MSL2000H	Curatorial Practice
MSL2325H	Museums and New Media Practice
MSL2330H	Interpretation and Meaning Making in Museums
MSL2500H	Constructing and Curating Digital Heritage

Religion

RLG2023H	Religion, Media, and Culture

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

MAC1000Y	Methods in Mediterranean Archaeology
MAC2000H	Mediterranean Archaeology Fieldwork (Credit/No Credit)

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.

Contact and Address

Web: tmc.utoronto.ca
Email: msk.admin@utoronto.ca
Telephone: (416) 978-0841
Fax: (416) 978-6395

Collaborative Specialization in Musculoskeletal Sciences
Dr. Jane Mitchell
1 King's College Circle, Room 4342
Toronto, Ontario M5S 1A8
Canada

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:
  - a curriculum vitae (CV)
  - a 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 (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

MSC3001H	Foundations in Musculoskeletal Science
SRM3335H[+]	Master’s Seminar Series — Compulsory Attendance
SRD4445H[+]	Doctoral Seminar Series — Compulsory Attendance

[+] *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 — MHSc
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.

APD3286H	Developmental Neurobiology
APD5000H	Special Topics in Applied Psychology and Human Development: Master's Level
CSC2506H	Probabilistic Learning and Reasoning
CSC2515H	Introduction to Machine Learning
CSC2523H	Object Modelling and Recognition
CSC2545H	Kernel Methods and Support Vector Machines
DEN1060H	Oral Physiology: Sensory and Neuromuscular Function
JEB1444H	Neural Engineering
JNP1017H+	Current Topics in Molecular and Biochemical Toxicology
JNP1018H+	Molecular and Biochemical Basis of Toxicology
JNR1444Y	Fundamentals of Neuroscience: Cellular and Molecular — Lectures
JNS1000Y	Fundamentals of Neuroscience: Systems and Behaviour
JPB1071H	Advanced Topics: Computational Neuroscience
JPM1005Y	Behavioural Pharmacology
JYG1555H	Advanced Topics: Cellular and Molecular Neurobiology
LMP2222H	Neurodegenerative Disease — Mechanisms, Models, and Methods
MSC1006H	Neuroanatomy
MSC1081H	Studies in Schizophrenia
MSC1085H	Molecular Approaches to Mental Health and Addictions
MSC1087H	Neuroimaging Methods Using Magnetic Resonance Imaging
MSC1088H	Brain Positron Emission Tomography
MSC6000H	Special Topics Reading Course (requires prior permission of the Neuroscience Program Director)
MUS7110H	Neurosciences of Music: Scientific Foundations, Clinical Translations
NEU1000H0	Neuroscience Distinguished Lecture Series (Master's) (Credit/No Credit)
NEU2000H0	Neuroscience Distinguished Lecture Series (Doctoral) (Credit/No Credit)
PSL1024H	Advanced Topics: Neuroendocrinology
PSL1026H	Advanced Topics: Experimental Cell Physiology
PSL1047H	Advanced Topics: Somatosensory and Pain Neuroscience
PSL1050H	Advanced Topics: The Hippocampus from Cell to Behaviour
PSL1053H	Advanced Topics: Critical Assessment of Ion Channel Function
PSL1068H	Advanced Topics: Molecular Basis of Behaviour
PSL1075H	Biology In Time
PSL1441H	Systems Level Neuroplasticity
PSL1445H	Mechanistic Molecular and Cellular Neuroscience
PSL1446H	Molecular and Cellular Aspects of Neural Disorders
PSL1452H	Fundamentals of Ion Channel Function
PSY1200H	Selected Topics in Psychology
PSY4706H	Human Brain Neuroanatomy
PSY5101H	Mechanisms of Behaviour

PSY5110H	Advanced Topics in Behavioural Neuroscience I
PSY5111H	Advanced Topics in Behavioural Neuroscience II
PSY5112H	Advanced Topics in Behavioural Neuroscience III
PSY5121H	Advanced Topics in Animal Behaviour and Motivation II
PSY5130H	Advanced Topics in Neuropsychology I
PSY5201H	Audition
PSY5203H	Higher Cognition
PSY5204H	Attention
PSY5205H	Memory
PSY5210H	Advanced Topics in Perception I
PSY5211H	Advanced Topics in Perception II
PSY5212H	Advanced Topics in Perception III
PSY5220H	Advanced Topics in Cognition I
PSY5221H	Advanced Topics in Cognition II
PSY5222H	Advanced Topics in Cognition III
PSY5310H	Advanced Topics in Development I
PSY5311H	Advanced Topics in Development II
REH1510H	Disordered and Restorative Motor Control
REH5100H	Introduction to Cognitive Rehabilitation Neuroscience I: Basic Science to Clinical Applications

[0] 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 fulfil the requirements as neuroscience courses but might be useful for neuroscience students.

JBL1507H	Biochemistry of Inherited Disease
JDB1025H	Developmental Biology
PSY5102H	Motivational Processes
SLP1522Y	Speech Physiology and Acoustics
SLP1533Y	Aphasia
SLP3001H	Theoretical Foundations of Communication Sciences

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):
  - Students must complete PHM1500H *Next-Generation Precision Medicine Seminar Series* (0.5 FCE), offered through the Graduate Department of Pharmaceutical Sciences.
  - 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

PHM1500H	Next-Generation Precision Medicine Seminar Series

Modular Courses

Each modular course is worth 0.25 full-course equivalent (FCE).

CHE1134H	Advances in Bioengineering
CHE1333H	Biomaterials Engineering for Nanomedicine
CHE1334H	Organ-on-a-chip Engineering
CHM1056H	Techniques for Studying the Chemical, Structural, and Dynamic Properties of Biomolecules
CHM1059H	Chemical Biology in Complex Systems
CHM1068H	Topics in Biological and Medicinal Chemistry
PHM1500H	Next-Generation Precision Medicine Seminar Series
PHM2101H	Pharmaceutical Sciences Module: Precision in vitro Diagnostics
PHM2102H	Pharmaceutical Sciences Module: Introduction to Fundamentals of Drug Discovery

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
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: 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.

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

APS1305H	PsychEng Seminar Series — Master's Level (Credit/No Credit)
APS1308Y[0]	PsychEng Seminar Series — Doctoral Level (Credit/No Credit)

Elective Courses

Civil Engineering

CIV1320H	Indoor Air Quality

Electrical and Computer Engineering

ECE1774H	Sensory Cybernetics (suitable for Engineering students only)
ECE1778H	Creative Applications for Mobile Devices
JEB1444H	Neural Engineering (suitable for Engineering students only)

Mechanical and Industrial Engineering

MIE1070H	Intelligent Robots for Society
MIE1402H	Experimental Methods in Human Factors Research
MIE1403H	Analytical Methods in Human Factors Research
MIE1412H	Human-Automation Interaction
MIE1415H	Analysis and Design of Cognitive Work
MIE1505H	Enterprise Modelling
MIE1510H	Formal Techniques in Ontology Engineering
MIE1720H	Creativity in Conceptual Design

Psychology

PSY1000H	Directed Studies
Department of Psychology courses offered in the 5000 series; contact the department for exclusions.	

[0] *Course that may continue over a program. Credit is given when the course is completed.*

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.

Contact and Address

Web:
www.publichealthpolicy.utoronto.ca/collaborativeprogram.html
Email: publichealthpolicy@utoronto.ca
Telephone: (416) 978-6512
Fax: (416) 946-0340

Collaborative Specialization in Public Health Policy
University of Toronto
Suite 534, 155 College Street
Toronto, Ontario M5T 3M7
Canada

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 fulfil 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

CHL5300H	Public Health Policy
CHL5308H	Tools and Approaches for Public Health Policy Analysis and Evaluation
CHL5309H	Advanced Analysis of Topical Issues in Public Health Policy
HAD5011H	Canada's Health Care System and Health Policy (Doctoral Stream)
PPG1001H	The Policy Process
SRM3333H	Public Health Policy Seminar Series (Master's Level)

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 — MHSc
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

- present their research at least once at either the Resuscitation in Motion scientific meeting or in the Foundations MSC4001H core course.

SRM3333H	Resuscitation Sciences Graduate Seminar Series (master's level)
SRD4444H	Resuscitation Sciences Graduate Seminar Series (doctoral level)

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.

Resuscitation Sciences: Courses

MSC4001H	Foundations in Resuscitation Science Research
MSC4002H	Advanced Topics in Resuscitation Science Research (PhD students only)

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:
  - 0.5 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.
- 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

SDS1000H	Theoretical and Methodological Issues in Sexual Diversity Studies
SDS1002H	Comparative Disciplinary Approaches: A Research Seminar (prerequisite: SDS1000H or permission of the instructor)

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: pharmtox.utoronto.ca/cst
Email: pharmtox.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

JNP1014Y	Interdisciplinary Toxicology
JNP1016H	Graduate Seminar in Toxicology (prerequisite or co-requisite: JNP1014Y)

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 — MScPl, 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

Overview

The Graduate Collaborative Specialization in Women and Gender Studies (CWGS) provides students with an opportunity for advanced feminist studies in concert with an MA or PhD degree in another discipline. The Collaborative Specialization offers a rich interdisciplinary environment in which to 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 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 fulfil 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.
- Students are required to present their work in the seminar at least once before graduating.
- 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

WGS5000H	Feminist Theories, Histories, Movements I
WGS5001H	Feminist Theories, Histories, Movements II

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.

Contact and Address

Web: www.dlsph.utoronto.ca/programs/collaborative-specialization-in-womens-health

Kristen Dileo, Administrator
Collaborative Specialization in Women's Health
Email: Kristen.Dileo@wchospital.ca
Telephone: (416) 351-3732 ext. 2180

Janice Du Mont, Director
Collaborative Specialization in Women's Health
c/o Women's College Research Institute, Women's College Hospital
76 Grenville Street, 6th floor
Toronto, Ontario M5S 1B2
Canada

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

WPL1131H	Introduction to Workplace Learning and Social Change

Master's-Level Electives

The list of electives is subject to change.

IRE1362H	Organizational Behaviour
IRE1611H	Sociology of Work and Organizations
IRE1615H	Labour and Globalization
IRE1620H	Labour Relations Problems in Historical Perspective
LHA1113H	Gender and Race at Work
LHA1115H	Learning for the Global Economy
LHA1119H	Creating a Learning Organization
LHA1145H	Participatory Research in the Community and the Workplace
LHA1146H	Women, War, and Learning
LHA1147H	Women, Migration, and Work
LHA1148H	Introduction to Workplace, Organizational, and Economic Democracy
LHA1150H	Critical Perspectives on Organizational Change
LHA1182H	Nonprofits, Co-operatives, and the Social Economy: An Overview
LHA1185H	Leadership in Organizations: Changing Perspectives
LHA1186H	Organizational Change in the Nonprofit and Public Sectors
LHA1195H	Technology @ Work: The Internet in Workplace Learning and Change
LHA5100H*	Special Topics in Adult Education and Community Development (Master's Level)*
LHA5800H*	Special Topics in Higher Education: Master's Level*
SJE3916H	Women in Leadership Positions: Intersectionalities and Leadership Practices: Sociological Implications in Education
SJE5000H*	Special Topics in Social Justice Research in Education: Master's Level*
WGS 486 / WGS1020H*	Gender and Globalization: Transnational Perspectives
WPL2944H	Sociology of Learning and Social Movements

***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

WPL3931H	Advanced Studies in Workplace Learning and Social Change

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:

LHA1108H	Adult Learning
LHA3183H	Introduction to Institutional Ethnography (RM)
LHA5105H	Special Topics in Adult Education and Community Development: Master's Level
LHA6100H*	Special Topics in Adult Education and Community Development: Doctoral Level*
WPL2944H	Sociology of Learning and Social Movements

***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 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 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.

Year	Progression	Specific Requirements*

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 Astronomical 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.[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:
  - 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 major in Biochemistry, 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.

Year	Progression	Specific Requirements*

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 Biochemistry, 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.		

UTSC, Biochemistry (Major Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Bch (Maj Co-op) HBSc / MT: Introduction

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
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 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:
  - 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.
- 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 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 co-op in Biochemistry, 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.

Year	Progression	Specific Requirements*

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 co-op in Biochemistry, 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.		

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
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 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 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 Biological Chemistry, which fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, 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.

Year	Progression	Specific Requirements*

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 Biological Chemistry, 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, Biological Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Bio Chm (Spec) HBSc / MT: Introduction

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).

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-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) 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) 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 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 in Biological Chemistry, which fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, 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.

Year	Progression	Specific Requirements*

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 Biological Chemistry, 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).
		• 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:
  - 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 Biological Chemistry, which fulfils the 6.0 FCEs required for Science-Biology, Science-Chemistry, 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.

Year	Progression	Specific Requirements*

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 Biological Chemistry, 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.		

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:
  - 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, 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.

Year	Progression	Specific Requirements*

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, 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, 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:
  - 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 major in Biology, 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.

Year	Progression	Specific Requirements*

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, 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.		

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:
  - Complete the specialist in Biology, 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.

Year	Progression	Specific Requirements*

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 Biology, 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.		

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.

Year	Progression	Specific Requirements*

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.[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, 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:

  - 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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 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 (Major), Honours Bachelor of Science / Master of Teaching

UTSC Chm (Maj) HBSc / MT: Introduction

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:
  - 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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 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

UTSC Chm (Maj Co-op) HBSc / MT: Introduction

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.
  - 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 major co-op 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.

Year	Progression	Specific Requirements*

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 co-op in Chemistry, 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.		

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 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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 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:
  - 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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, 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:
  - 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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 of 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, 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 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 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.

Year	Progression	Specific Requirements*

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* and
  - 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.

Year	Progression	Specific Requirements

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:
  - 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 major in Conservation and Biodiversity, 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.

Year	Progression	Specific Requirements*

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 Conservation and Biodiversity, 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.		

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:
  - 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 Conservation and Biodiversity, 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.

Year	Progression	Specific Requirements*

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 Conservation and Biodiversity, 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.		

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.

Year	Progression	Specific Requirements*

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.[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, 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.

Year	Progression	Specific Requirements
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:
  - 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 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 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 English, which fulfils the 6.0 FCEs required for English 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 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.

Year	Progression	Specific Requirements*

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 minor in Education and Society;
		  ○ 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[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 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:
  - 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 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:
  - Complete the major in English, which fulfils the 6.0 FCEs required for English 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 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.

Year	Progression	Specific Requirements*

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 English, 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 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 (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:
  - 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 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 co-op in English, which fulfils the 6.0 FCEs required for English 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 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.

Year	Progression	Specific Requirements*

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 co-op in English, 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 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:
  - 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 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 English, which fulfils the 6.0 FCEs required for English 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 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.

Year	Progression	Specific Requirements*

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 specialist in English, 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 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.

Contact

Honours Bachelor of Arts Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-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 (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:
  - 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]).
- 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.
- 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:
  - Complete the specialist co-op in English, which fulfils the 6.0 FCEs required for English 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 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.

Year	Progression	Specific Requirements*

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 specialist co-op in English, 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 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
Email: mmeriano@utsc.utoronto.ca

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.

Year	Progression	Specific Requirements
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
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

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 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.

Year	Progression	Specific Requirements
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 Biology (Specialist), Honours Bachelor of Science / Civil Engineering, Master of Engineering

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
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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

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.

Year	Progression	Specific Requirements
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
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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

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.

Year	Progression	Specific Requirements
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 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.

Year	Progression	Specific Requirements

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:
		  ○ 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 Biology (Specialist Co-op), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Bio (Spec Co-op) HBSc / MEnvSc: Introduction

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:
  - 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.

Year	Progression	Specific Requirements

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:
		  ○ 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 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:
  - 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 Environmental Biology, 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.

Year	Progression	Specific Requirements*

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 Environmental Biology, 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.		

UTSC, Environmental Biology (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Env Bio (Spec Co-op) HBSc / MT: Introduction

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:
  - 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 Biology, 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.

Year	Progression	Specific Requirements*

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 Environmental Biology, 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.		

UTSC, Environmental Chemistry (Specialist), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

UTSC Env Chm (Spec) HBSc / Chem MEng: Introduction

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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / 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 Chemistry Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-chemistry-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 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.

Year	Progression	Specific Requirements
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, Environmental Chemistry (Specialist Co-op), Honours Bachelor of Science / Chemical Engineering and Applied Chemistry, Master of Engineering

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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / 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 Chemistry Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-chemistry-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 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.

Year	Progression	Specific Requirements
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 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 / 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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Chemistry / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
Email: mmeriano@utsc.utoronto.ca

Environmental Chemistry Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-chemistry-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 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.

Year	Progression	Specific Requirements
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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Chemistry / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
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Environmental Chemistry Program
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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 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.

Year	Progression	Specific Requirements
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:
  - 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.

Year	Progression	Specific Requirements

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:
		  ○ 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 Chemistry (Specialist Co-op), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Chm (Spec Co-op) HBSc / MEnvSc: Introduction

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
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
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:
  - 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.

Year	Progression	Specific Requirements

1 to 3	• HBSc degree requirements.	• 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:
		  ○ 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 Chemistry (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Env Chm (Spec) HBSc / MT: Introduction

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 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 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.

Year	Progression	Specific Requirements*

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 Environmental Chemistry, 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, Environmental Chemistry (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

UTSC Env Chm (Spec Co-op) HBSc / MT: Introduction

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:
  - 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 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.

Year	Progression	Specific Requirements*
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 Environmental Chemistry, 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 (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:
  - Have a B+ 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 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.

Year	Progression	Specific Requirements
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.

Year	Progression	Specific Requirements
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.

Year	Progression	Specific Requirements
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

UTSC Env Geo (Spec Co-op) HBSc / Civ MEng: Introduction

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.

Year	Progression	Specific Requirements
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 Geoscience (Specialist), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Geo (Spec) HBSc / MEnvSc: Introduction

Overview

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.

Year	Progression	Specific Requirements

1 to 3	• HBSc degree requirements.	• 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.

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 Geoscience (Specialist Co-op), Honours Bachelor of Science / Master of Environmental Science

UTSC Env Geo (Spec Co-op) HBSc / MEnvSc: Introduction

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
Web: utsc.utoronto.ca/gradpes/programs-menvsc-0
Email: gisela.bento@utoronto.ca

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:
  - 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.

Year	Progression	Specific Requirements

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:
		  ○ 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).

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

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Environmental Management Program
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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.

Year	Progression	Specific Requirements
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, GGR201H5, 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 fulfil 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.

		• 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 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:
		  ○ Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H.
		  ○ Management electives: EES1124H, ENV1707H, RSM2918H, SSM2010H, SSM2020H.
		• 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
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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.inteive biology
- 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.

Year	Progression	Specific Requirements
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: ○ Introduction: ENV100Y5 (1.0 FCE). ○ Economics: ECO100Y5 (1.0 FCE). ○ 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: ○ Environmental Management: ENV201H5 (0.5 FCE). ○ 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. ○ Science: 1.0 FCE chosen from BIO201H5, BIO205H5, ERS201H5, ERS202H5, ERS203H5, GGR201H5, GGR214H5, GGR217H5, GGR227H5, PHY237H5. ○ Statistics: 0.5 FCE chosen from GGR276H5, STA220H5, or other 200/300-level statistics course with the program advisor's permission. ○ 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. • 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 complete a minimum of **5.0 FCEs** in core courses: ○ Environmental Management Perspectives: 1.5 FCEs chosen from ANT357H5, ENV310H5, ENV393H5, HIS308H5, HIS319H5. ○ 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, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR426H5, GGR493HS, JGE378H5, JUG320H1, MGT395H5, PHL373H1, POL343Y5, SOC339H5, SOC349H5, SOC356H5, WR1375H5. ○ 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: 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. • 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.

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:
		  ○ Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H.
		  ○ Management electives: EES1124H, ENV1707H, RSM2918H, SSM2010H, SSM2020H.
		
		• The internship placement (SSM1110H) will range from 2 to 4 months in length.

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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Environmental Physics Program
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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
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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.

Year	Progression	Specific Requirements
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

UTSC Env Phy (Spec Co-op) HBSc / Chem MEng: Introduction

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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist Co-op in Environmental Physics / 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 Physics Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-co-operative-program-environmental-physics-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 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.

Year	Progression	Specific Requirements
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), 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

Mandy Meriano
UTSC, Honours Bachelor of Science, Specialist in Environmental Physics / Civil Engineering, Master of Engineering
Web: utsc.calendar.utoronto.ca/combined-degree-programs-honours-bachelor-science-master-engineering
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Environmental Physics Program
University of Toronto Scarborough
Web: utsc.calendar.utoronto.ca/specialist-program-environmental-physics-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 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.

Year	Progression	Specific Requirements
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 Co-op), Honours Bachelor of Science / Civil Engineering, Master of Engineering

UTSC Env Phy (Spec Co-op) HBSc / Civ MEng: Introduction

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

Mandy Meriano
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Environmental Physics Program
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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.

Year	Progression	Specific Requirements
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
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-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.

Year	Progression	Specific Requirements
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: 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).

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

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 Environmental Science Program
University of Toronto Scarborough
Web: 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:
  - 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.

Year	Progression	Specific Requirements

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:
		  ○ 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), 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:
  - 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.
- 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:
  - Complete the specialist 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.

Year	Progression	Specific Requirements*

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 Environmental Physics, 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, Environmental Physics (Specialist Co-op), Honours Bachelor of Science / Master of Teaching

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.

Year	Progression	Specific Requirements*
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 Environmental Physics, 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.		

UTM, Environmental Science (Major), Honours Bachelor of Science / Sustainability Management, Master of Science

UTM Env Sci (Maj) HBSc / MScSM: Introduction

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.

Year	Progression	Specific Requirements
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: o Introduction: ENV100Y5 (1.0 FCE). o 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: o Environmental Management: ENV201H5 (0.5 FCE). o Biological and Ecological Perspectives: 0.5 FCE chosen from BIO202H5, BIO203H5, BIO205H5, BIO206H5. o Geographical Perspectives: 0.5 FCE chosen from GGR201H5, GGR214H5, GGR217H5, GGR227H5. o Physical and Chemical Perspectives: 0.5 FCE chosen from CHM231H5, CHM242H5, ERS201H5, JCP221H5, PHY237H5. o 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 fulfil the conditions of the MScSM offer.	• Students must complete a minimum of 2.5 FCEs in core courses: o Environmental Science: ENV330H5 (0.5 FCE). o Field, Project-Based, and Research Perspectives: 0.5 FCE chosen from ANT318H5, BIO3313H5, BIO329H5, BIO416H5, ERS325H5, ENV229Y5, ENV331H5, ENV332H5, ENV399Y5, GGR379H5, JEG400Y5, JEG401Y5, SCI395H5, SCI396H5, SCI498H5, SCI499H5, or another program-relevant field course (SCI) with the program advisor's permission. o 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, GGR464H5, GGR479H5, JGE378H5, PHY331H5. o 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, JGE378H5, MGT394H5, 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.
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. o Management electives: EES1124H, ENV1707H, RSM2918H, SSM2010H, SSM2020H. • The internship placement (SSM1110H) will range from two to four months in length.

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:
  - 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.

Year	Progression	Specific Requirements
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, GGR112H5, 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 BIO360H5, BIO361H5, CHM211H5, GGR276H5, STA220H5, STA221H5. ○ 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 fulfil 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.

		• 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 to the CDP, students will work with the MScSM director to choose appropriate graduate-level courses to complete during their final undergraduate year.
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: ○ Science electives: EES1117H, EES1125H, ENV1002H, ENV1704H. ○ Management electives: EES1124H, ENV1707H, RSM2918H, SSM2010H, SSM2020H. • 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.
  - Be registered in Year 3 of the HBA 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 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.

Year	Progression	Specific Requirements
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.

Year	Progression	Specific Requirements
1 to 3	• Undergraduate courses in accordance with Faculty of Arts and Science regulations for the HBSc degree and Education and Society minor.	• 15.0 credits toward the HBSc 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 HBSc 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 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.
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 program entry for full course requirements. • Note that students will have previously completed the 1.0 FCE in electives in Year 4 of the HBSc program.

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:
  - 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 major in Evolutionary Anthropology, which fulfils the 6.0 FCEs required for Social 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.

Year	Progression	Specific Requirements*

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 Evolutionary Anthropology, 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.		

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:
  - 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 Evolutionary Anthropology, which fulfils the 6.0 FCEs required for Social 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.

Year	Progression	Specific Requirements*

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 Evolutionary Anthropology, 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.		

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.

Year	Progression	Specific Requirements
1	• Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.	• 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.
2	• Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.	• 5.0 FCEs toward the HBSc program and degree requirements.
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.

Year	Progression	Specific Requirements*

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

UTM For Chm (Spec) HBSc / MT: Introduction

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:
  - 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 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.

Year	Progression	Specific Requirements*

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 Chemistry, 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 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:
  - 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 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:
  - Successfully complete the major in 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 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.

Year	Progression	Specific Requirements*
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 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 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 (Major Co-op), Honours Bachelor of Arts / Master of Teaching

UTSC Fre (Maj Co-op) HBA / MT: Introduction

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:
  - 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 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:
  - Complete the major co-op in 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 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.

Year	Progression	Specific Requirements*

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 co-op in 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 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), 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:
  - 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 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:
  - Complete the specialist in 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 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.

Year	Progression	Specific Requirements*
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 specialist in 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 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:
  - 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 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 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:
  - Complete the specialist co-op in 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 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.

Year	Progression	Specific Requirements*

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 includes:
		  ○ the specialist co-op in 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 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.		

UTM, French Studies (Major), Honours Bachelor of Arts / Master of Teaching

UTM Fre St (Maj) HBA / MT: Introduction

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:
  - 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 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:
  - Complete the major in French Studies, 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.

Year	Progression	Specific Requirements*
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 French Studies, 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 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.		

UTM, French Studies (Specialist), Honours Bachelor of Arts / Master of Teaching

UTM Fre St (Spec) HBA / MT: Introduction

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:
  - 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 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:
  - Complete the specialist in French Studies, 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 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 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.

Year	Progression	Specific Requirements*

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 specialist in French Studies, 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.		

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.

Year	Progression	Specific Requirements
1	• MSW Year 1 program requirements.	• Complete 4.0 full-course equivalents (FCEs) in required social work courses. • Complete 0.5 FCE, the Year 1 social work extended practicum (SWK4701H).

	• Students entering with a BSW are exempt from the MSW Year 1 program requirements.	
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: mtinfo@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:
  - 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 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 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 History, which fulfils the 6.0 FCEs required for History 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 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.

Year	Progression	Specific Requirements*
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 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:
  - 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 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 History, which fulfils the 6.0 FCEs required for History 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 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.

Year	Progression	Specific Requirements*

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 History, 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 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:
  - 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 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 History, which fulfils the 6.0 FCEs required for History 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 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.

Year	Progression	Specific Requirements*

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 specialist in History, 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 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 Biology (Major), Honours Bachelor of Science / Master of Teaching

UTSC Hum Bio (Maj) HBSc / MT: Introduction

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:
  - 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 major in Human Biology, 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.

Year	Progression	Specific Requirements*

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 Human Biology, 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.		

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:
  - 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 Human Biology, 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.

Year	Progression	Specific Requirements*

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 Human Biology, 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.		

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:
  - 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 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 Geography, which fulfils the 6.0 FCEs required for Geography 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 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.

Year	Progression	Specific Requirements*

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 Geography, 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 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:
  - 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 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 Geography, which fulfils the 6.0 FCEs required for Geography 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 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.

Year	Progression	Specific Requirements*

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 specialist in Geography, 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 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, 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.

Year	Progression	Specific Requirements*
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:
		  ○ 2.0 required FCEs as follows: MSL1150H, MSL1230H, MSL2231H, and MSL2370H
		  ○ 0.5 FCE: MSL2350H or INF2040H
		  ○ MSL4000Y (1.0 FCE)
		  ○ 1.0 FCE in electives.
		• Concentration Pathway:
		  ○ 2.0 required FCEs as follows: MSL1150H, MSL1230H, MSL2231H, and MSL2370H
		  ○ 0.5 FCE: MSL2350H or INF2040H
		  ○ MSL4000Y (1.0 FCE)
		  ○ 1.0 FCE in electives.

3	• Complete 3.5 FCEs towards the MI and MMSt program requirements.	• General Program Pathway:
		  ○ 3.5 FCEs in electives.
		• Concentration Pathway:
		  ○ 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

UTSC Int Bio (Spec) HBSc / MEnvSc: Introduction

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* and
  - 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.

Year	Progression	Specific Requirements
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: 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 BIOC63H3 *Conservation Biology* (0.5 FCE) and o 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: 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).

UTSC, Integrative Biology (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Int Bio (Spec) HBSc / MT: Introduction

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:
  - 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 Integrative Biology, 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.

Year	Progression	Specific Requirements*

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 Integrative Biology, 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.		

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:
  - 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.
  - 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:
  - Complete 6.0 FCEs in the first teaching subject (i.e., health and physical education).
  - 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.

Year	Progression	Specific Requirements*
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: ○ a minimum of 6.0 FCEs in the first teaching subject (i.e., health and physical education); ○ a minimum of 3.0 FCEs in the second teaching subject[1]. • 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.
[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.		

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.

Year	Progression	Specific Requirements*
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2	• PhD program requirements.	• Complete 2.0 full-course equivalents (FCEs) in Criminology and Sociolegal Studies.
3 and 4	• JD program requirements. • PhD program requirements.	• Complete 45 JD credits. • Complete the PhD comprehensive exam and dissertation proposal. • Achieve candidacy by the end of Year 4.
5 and 6	• PhD program requirements.	• Complete any remaining PhD program requirements and a PhD thesis.

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2 and 3	• JD program requirements. • MA program requirements.	• 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.

Program Length

3 years

Time Limit

4 years

STG, Law, Juris Doctor / Economics, Doctor of Philosophy

STG JD / Eco PhD: Introduction

Overview

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.

Year	Progression	Specific Requirements*
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2	• PhD program requirements.	• Students normally complete ECO2010H *Mathematics and Statistics for PhD Students* (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.
3	• PhD and JD program requirements.	• 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 *Graduate Research Seminar* (Credit/No Credit). • Complete the Year 2 economics paper. • Complete 14 to 16 JD credit hours.
4	• JD program requirements.	• Complete 28 to 32 JD credit hours including the extended paper requirement in law.
5 and 6	• PhD program requirements.	• 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.

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2, 3, and 4	• JD program requirements. • MA program requirements.	• Complete 45 JD credits including a perspective course, a moot (compulsory or competitive), and an international/comparative/transnational (ICT) perspective course. • Complete ECO1010H *Mathematics and Statistics for MA and MFE Students* (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).

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2 and 3	• JD program requirements. • · MA program requirements.	• · 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.

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2	• MA program requirements.	• Complete a minimum of 2.0 FCEs toward the MA program.

2, 3, and 4	• JD program requirements.
	• MA program requirements.
	• Additional MA or JD program requirements chosen by the student.
		• 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:
		  ○ ·1.0 FCE MA courses or
		  ○ 6 JD credits or
		  ○ 0.5 FCE MA course and 3 JD credits.

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2	• Year 1 MBA program requirements.	• Complete 5.63 FCEs in required Year 1 courses of the MBA program, including 1.5 elective FCEs at the 2000 level.

3 and 4	• 2000-level MBA courses.
	• JD program requirements.
	• Complete the remaining MBA 1000-level required courses.
		• ·Complete 3.67 FCEs as follows:
		  ○ 3.5 FCEs in 2000-level MBA courses.
		  ○ 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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
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: ○ GLA1001H *Macroeconomics: Markets, Institutions, and Growth*; ○ GLA1003H *Global Security*; ○ GLA1010H *Microeconomics for Global Affairs*; ○ GLA1011H *Global Innovation Policy*; ○ GLA1012H *Statistics for Global Affairs*; and ○ GLA1014H *Global Development*. ○ 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: ○ 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*; ○ 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.

Year	Progression	Specific Requirements
1	• JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law
2	• MI program requirements.	• 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.
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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2	• Year 1 MPP program requirements, with the exception of PPG1008H.	• Complete 3.0 full-course equivalents (FCEs) in the MPP program: ○ PPG1000H *Governance, Institutions, and Public Policy*; ○ PPG1002H *Microeconomics for Policy Analysis*; ○ PPG1003H *Macroeconomics for Policy Analysis*; ○ PPG1004H *Quantitative Methods for Policy Analysis*; ○ PPG1005H *The Social Context of Policy-Making*; and ○ 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: ○ · PPG2000H *Politics and the Policy Process*; ○ · PPG2002H *Topics in Applied Economics for Public Policy*; ○ · PPG2003H *Capstone Course: Integrating Issues in Public Policy*; ○ · either PPG2011H *Ethics and the Public Interest* or PPG2022H *Moral Foundations of Public Policy*; and ○ · 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 (SUYRP). 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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
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: ○ Children and Their Families ○ Social Justice and Diversity ○ Health and Mental Health ○ Social Service Administration ○ 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: ○ 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

STG, Law, Juris Doctor / Philosophy, Doctor of Philosophy

STG JD / Phl PhD: Introduction

Overview

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.

Year	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
2 and 3	• JD program requirements. • PhD program requirements.	• Complete 48 JD credits including a moot, a perspective course, and an international/comparative/transnational (ICT) perspective course. • 2.0 full-course equivalents (FCEs) in Philosophy courses, which will count as 8 JD credits toward the total JD credits required.
4	• PhD program requirements.	• Complete any remaining courses in the PhD program. • Complete area and language exams required for the PhD program.
5 and 6	• PhD program requirements.	• Complete any remaining PhD program requirements and a PhD thesis.

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	Progression	Specific Requirements
1	• Year 1 JD program requirements.	• Complete all Year 1 courses of the JD program at the Faculty of Law.
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.
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.
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.

Year	Progression	Specific Requirements
1	• 5.0 full-course equivalents (FCEs) in MGA program requirements with a minimum B+ standing. • At the end of Year 1, declare an emphasis as part of the MGA degree program.	• **3.5 required FCEs:** o GLA1001H *Macroeconomics: Markets, Institutions, and Growth*; o GLA1003H *Global Security*; o GLA1006H *International Legal Challenges*; o GLA1010H *Microeconomics for Global Affairs*; o GLA1011H *Global Innovation Policy*; o GLA1012H *Statistics for Global Affairs*; o GLA1014H *Global Development*. • **1.0 elective FCE** from the following Year 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 FCE:** GLA1007H *Global Internship*, to be taken in the Summer session.
2	• 5.63 FCEs in MBA program requirements.	• **4.13 required FCEs in MBA courses**: o RSM1165H *Leveraging Diverse Teams* (Credit/No Credit); o RSM1201H *Foundations of Strategic Management*; o RSM1210H *Managerial Economics*; o RSM1211H *Economic Environment of Business*; o RSM1215H *Decision Making with Models and Data*; o RSM1220H *Financial Accounting and Reporting: A Global Perspective*; o RSM1222H *Managerial Accounting*; o RSM1231H *Finance I: Global Markets and Valuation*; o RSM1232H *Finance II: Corporate Finance*; o RSM1240H *Operations Management*; o RSM1250H *Managing Customer Value*; o RSM1260H *Leading People in Organizations*; and o RSM1282H *Statistics for Management.* • **1.5 elective FCEs** from the 2000-level MBA course list. • Specific restrictions apply for students who wish to take MBA experiential learning courses. Please refer to the MBA program requirements for more information.
3	• 3.17 FCEs in MBA program requirements. • 3.5 FCEs in MGA program requirements.	• **0.17 required FCE** in MBA courses: RSM1160H *Business Ethics*. • **3.0 elective FCEs** from the 2000-level MBA course list. • **2.5 elective FCEs** in MGA courses. Of these, 1.5 FCEs are taken in the chosen emphasis. • **1.0 required FCE:** GLA2000H *Capstone Seminar* and GLA2111H *Research Methods for Global Affairs*.

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

UTM, Language Teaching and Learning: French (Major), Honours Bachelor of Arts / Master of Teaching

UTM Lang Teach Learn Fre (Maj) HBA / MT: Introduction

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:

  - 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 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:
  - 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.

Year	Progression	Specific Requirements*
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 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:
  - 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.

Year	Progression	Specific Requirements*

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 specialist in Language Teaching and Learning: French and Italian, 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, 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
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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 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 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.

Year	Progression	Specific Requirements*

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 Mathematical 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[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, 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:

  - 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.
- Have an average grade equivalent to at least a B+, normally demonstrated by an average grade in Year 2.
- 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 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.

Year	Progression	Specific Requirements*

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 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.		

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:
  - Be registered in Year 3 of the HBSc program.
  - 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 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:
  - Complete the major 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 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.

Year	Progression	Specific Requirements*
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 Mathematics, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; ○ the minor in Education and Society; and ○ a second minor, which will also qualify as the minimum 3.0 FCEs required for 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 (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.
  - 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 major 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.

Year	Progression	Specific Requirements*

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 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 (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:
  - 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 major co-op in Mathematics, which fulfils the 6.0 FCEs required for Science-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.

Year	Progression	Specific Requirements*

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 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.

Year	Progression	Specific Requirements*

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 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:
  - 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 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.

Year	Progression	Specific Requirements*

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 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 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.

Year	Progression	Specific Requirements
1	• Year 1 MD program requirements.	• Complete Year 1 courses of the MD program: 6.0 full-course equivalents (FCEs).
2	• Year 2 MD program requirements.	• Complete Year 2 courses of the MD program: 5.0 FCEs.
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: mdphd.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 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 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.

Year	Progression	Specific Requirements
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 MGEB12H3 *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 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.

Year	Progression	Specific Requirements
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, 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:
  - be enrolled full-time and in good standing;
  - 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]).
- Applicants to the MSW program must:
  - maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program;
  - complete the requirements of their HBSc program;
  - 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.

Year	Progression	Specific Requirements

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:
  - be enrolled full-time and in good standing;
  - have a B+ 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].
- Applicants to the MSW program must:
  - maintain a B+ average (CGPA of 3.3) or higher in Year 3 and Year 4 of their HBSc program;
  - complete the requirements of their HBSc program;
  - 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.

Year	Progression	Specific Requirements

1 to 4	• HBSc degree requirements.
	• Work terms to fulfil 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:
		  ○ 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.	• 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:
		  ○ 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.
		  ○ *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:
    - 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.
    - 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.

Year	Progression	Specific Requirements*
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 Molecular 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.		

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:
  - 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 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.

Year	Progression	Specific Requirements*

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 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.		

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 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 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.

Year	Progression	Specific Requirements*

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.		

UTSC, Molecular Biology, Immunology and Disease (Major), Honours Bachelor of Science / Master of Teaching

UTSC Mol Bio Imm Dis (Maj) HBSc / MT: Introduction

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:
  - 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 major in Molecular Biology, Immunology and Disease, 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.

Year	Progression	Specific Requirements*

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 Molecular Biology, Immunology and Disease, 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.		

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 resumé, 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:
  - 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.
  - 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.

Year	Progression	Specific Requirements*
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.

Year	Progression	Specific Requirements*
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

UTSC, Physical and Mathematical Sciences (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Phy Mat Sci (Spec) HBSc / MT: Introduction

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 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:

- 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.

Year	Progression	Specific Requirements*

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.
		• A minimum of 20.0 FCEs in undergraduate courses. This includes:
		  ○ the specialist in Physical and Mathematical 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.[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 (20.0 FCEs) and MT degree (10.0 FCEs).

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, 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.
  - 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.
  - 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:
  - Complete 6.0 FCEs in the first teaching subject (i.e., health and physical education).
  - 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.

Year	Progression	Specific Requirements*
1 to 4	• BPHE 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: ○ a minimum of 6.0 FCEs in the first teaching subject (i.e., health and physical education); ○ 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 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 BPHE 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] 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:

  - 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 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.

Year	Progression	Specific Requirements*

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 Physics, 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, 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 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 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.

Year	Progression	Specific Requirements*

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 Physics and Astrophysics, 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.		

UTSC, Physics and Astrophysics (Specialist), Honours Bachelor of Science / Master of Teaching

UTSC Phy Ast (Spec) HBSc / MT: Introduction

Overview

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 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 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.

Year	Progression	Specific Requirements*

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 Physics and Astrophysics, 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, 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:
  - 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 major in Plant Biology, 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.

Year	Progression	Specific Requirements*

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 Plant Biology, 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.		

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:
  - Be registered in Year 3 of the HBSc 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 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:
  - Complete the major in Psychology, which fulfils the 6.0 FCEs required for Psychology 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 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.

Year	Progression	Specific Requirements*
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 Psychology, where the course requirements will fulfil the 6.0 FCEs required for the first teaching subject; ○ the minor in Education and Society; and ○ a second minor, which will also qualify as the minimum 3.0 FCEs required for 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, 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.

Year	Progression	Specific Requirements
1	• Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.	• 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.
2	• Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.	• 5.0 FCEs toward the HBSc program and degree requirements.
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.

Year	Progression	Specific Requirements
1	• Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.	• 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements.
2	• Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.	• 5.0 FCEs toward the HBSc program and degree requirements.
3	• 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.	• 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 (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 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.

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:
  - 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 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 Socio-Cultural Anthropology, which fulfils the 6.0 FCEs required for Social 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 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.

Year	Progression	Specific Requirements*

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 Socio-Cultural Anthropology, 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 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:
  - 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 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 Socio-Cultural Anthropology, which fulfils the 6.0 FCEs required for Social 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 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.

Year	Progression	Specific Requirements*
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 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.		

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 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 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 the fulfils 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 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.

Year	Progression	Specific Requirements*
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 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 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 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:
  - 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 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 Sociology, which fulfils the 6.0 FCEs required for Social 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 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.

Year	Progression	Specific Requirements*

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 Socio-Cultural Anthropology, 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 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:
  - 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 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 Sociology, which fulfils the 6.0 FCEs required for Social 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 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.

Year	Progression	Specific Requirements*

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 specialist in Sociology, 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 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:
  - 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 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 Theatre and Performance, which fulfils the 6.0 FCEs required for Dramatic Arts 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 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.

Year	Progression	Specific Requirements*
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 Theatre and Performance, 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 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

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